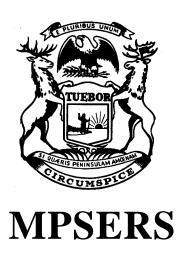
Michigan Public School Employees Retirement System

Comprehensive Annual Financial Report for the Year Ended September 30, 1998

A Pension Trust Fund of the State of Michigan John Engler, Governor

Michigan Public School Employees' Retirement System

Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1998



Prepared by:
Office of Retirement Services
Michigan Public School Employees' Retirement System
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The cost of printing this report was \$2,741.53 (\$1.52 each), which was paid for by the retirement system at no cost to taxpayers.

INTRODUCTORY SECTION

Certificate of Achievement Letter of Transmittal Board Members Advisors & Consultants Organization Chart

Certificate of Achievement

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Michigan Public School Employees Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



Letter of Transmittal

STATE OF MICHIGAN

JOHN ENGLER, Governor

Michigan Public School Employees'
Retirement System
General Office Building, Third Floor

P.O. Box 30171 Lansing, Michigan 48909-7671 Telephone (517) 322-5103 Outside Lansing 1-800-381-5111

DEPARTMENT OF MANAGEMENT AND BUDGET

February 16, 1999

The Honorable John Engler Governor, State of Michigan,

Members of the Legislature State of Michigan,

Retirement Board Members and Members, Retirees and Beneficiaries

Ladies and Gentlemen:

We are pleased to present the annual report of the Michigan Public School Employees' Retirement System (MPSERS or System) for fiscal year 1998.

Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the management of the System. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the System.

The Michigan Public School Employees' Retirement System was established by legislation under Public Act 136 of 1945. The number of active and retired members and beneficiaries for the System is presented in Note 1 of the financial statements in the Financial Section of this report. The purpose of the System is to provide benefits for all public school employees. The services provided by the staff are performed to facilitate benefits to members.

The 1998 annual report is presented in five sections. The Introductory Section contains the transmittal letter, identification of the administrative organization and professional consultants used by the System. The Financial Section contains the independent auditors' report, financial statements of the System and certain supplemental schedules. The Investment Section summarizes investment activities. The Actuarial Section contains the independent consulting actuary's certification, an outline of actuarial assumptions and methods, and other actuarial statistics. The Statistical Section contains statistical tables of significant data pertaining to the Retirement System.

MAJOR GOALS ACCOMPLISHED

The Office of Retirement Services (ORS) accomplished several major goals and initiatives in 1998 to improve services to the Michigan Public School Employees' Retirement System.

» The Office of Retirement Services' Customer Information Center (CIC) initiated toll-free phone service on January 30, 1998 for active and retired members who live outside the Lansing area. The CIC receives approximately

Letter of Transmittal (Continued)

20,000 phone calls per month. In addition, the Outreach Program now makes it possible for employees of all four retirement systems to receive retirement information at four locations - Detroit, Waterford, Holland and Lansing.

- » As a result of a Private Letter Ruling granted by the Internal Revenue Service, ORS implemented on July 1, 1998 a program to allow public school employees to make service credit purchases through tax-deferred payroll deductions. The initial response has been significant with over 6,500 members requesting service credit billings for this program.
- » Handled a record number of public school retirees (2,015) and processed their applications so that they could receive their first pension payment within 60 days or less of their retirement effective date.
- » In March of 1998 the Office of Retirement Services mailed the first issue of its new Connections newsletter to all retirees, with a second issue going out in October. The objectives for this newsletter are threefold: 1) To establish a direct connection with all retirees; 2) To remind retirees ORS is available to assist them and tell them how to access that assistance, and 3) To give retirees information that will assist them in doing business with the Office of Retirement Services.
- » Reengineering has redesigned the process for disability retirement whereas a common application, procedures, policies, tracking and process flow are now used for all four retirement systems. This has laid the groundwork for reducing total processing time by 50%.
- » The Office of Retirement Services is diligently working on a year 2000 plan to assure our computer hardware and software will be ready for the new millennium and beyond so that the customers of ORS will receive benefits and information in a timely manner.
- » A pension milestone was reached in August 1998 an annualized \$2 billion in combined pension payments for State retirees, Public School retirees, State Police retirees, and retired Judges. The \$1 billion mark was reached just eight years ago. This trend reinforces our ranking as the 19th largest public retirement system in the nation based on assets.
- » Satellite technology was used on September 10, 1998, when members of the Office of Retirement Services' staff reached out to school administrators and other reporting unit personnel to provide training on the system's Tax-Deferred Payment program implementation. A follow up survey found 98% of the respondents positive to this satellite presentation.
- » ORS implemented several initiatives designed to improve the health care benefits available to MPSERS retirees. These initiatives included: covering bone marrow transplants in special circumstances, expanding access to physical therapy providers, implementing a toll-free, 24 hour health resource phone service called Health Call, raising the dental annual maximum from \$800 to \$900 in 1999, and from \$900 to \$1,000 in 2000, covering dental crowns on implants, covering periodontal guided tissue regeneration in some circumstances.
- Because of rising prescription drug costs, costs per service, use of health services, and number of MPSERS members, ORS implemented the following initiatives to help keep benefits affordable: increasing the 1999 deductible

Letter of Transmittal (Continued)

for non-HMO enrollees to \$145 individual/\$290 family, increasing the 2000 deductible to \$165 individual/\$330 family, implementing a 10% copay on preventative dental care in 2000, modifying coordination of benefits for members with more than one dental plan.

» ORS staff continue monitoring the Optional HMO Pilot Program that provides MPSERS members in parts of Michigan both high-quality benefits and greater access to providers.

CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to MPSERS for its comprehensive annual financial report (CAFR) for the fiscal year ended September 30, 1997. The Certificate of Achievement is a pretigious national award recognizing conformance with the highest standards for preparation of a state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. The CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

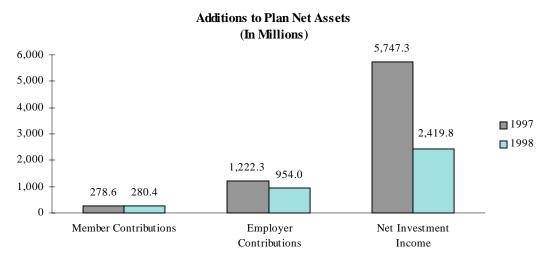
A Certificate of Achievement is valid for a period of one year only. We believe our current report continues to conform to the Certificate of Achievement program requirements, and are submitting it to the GFOA.

FINANCIAL INFORMATION

Additions to Plan Net Assets

The reserves needed to finance retirement and health benefits are accumulated through the collection of employer and employee contributions and through earnings on investments. Contributions and net investment income for fiscal year 1998 totaled approximately \$3.7 billion.

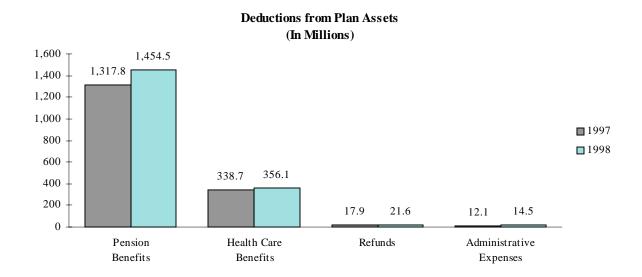
Total contributions and net investment income decreased 49.6% from those of the prior year due primarily to decreased investment earnings. Employer contributions decreased 22.0% and investment income decreased 57.9% from the prior year. The Investment Section of this report reviews the results of investment activity for 1998.



Letter of Transmittal (Continued)

Deductions From Plan Net Assets

The primary expenditures of the System include the payment of pension benefits to members and beneficiaries, payments for health, dental and vision benefits, refund of contributions to former members, and cost of administering the System. The growth of health care expenditures continued at a moderate rate during the year. As a result, expenditures for health care increased by \$17 million from \$339 million to \$356 million during the fiscal year. Total deductions for fiscal year 1998 were \$1,846.6 million, an increase of 9.5% over 1997 expenditures. The increase in pension benefit expenditures resulted from an increase in retirees (4,778) and an increase in benefit payments to retirees.



Internal Control

The management of the System is responsible for maintaining a system of adequate internal accounting control designed to provide reasonable assurance that transactions are executed in accordance with management's general or specific authorization, and are recorded as necessary to maintain accountability for assets and to permit preparation of financial statements in accordance with generally accepted accounting principles. The internal control structure is designed to provide reasonable assurance regarding the safekeeping of assets and reliability of all financial records.

INVESTMENT

The State Treasurer is the investment fiduciary and custodian of all investments of the System pursuant to state law. The primary investment objective is to maximize the rate of return on the total investment portfolio, consistent with a high degree of prudence and sufficient diversity to eliminate inordinate risks and to meet the actuarial assumption for the investment return rate. The investment activity for the year produced a total rate of return on the portfolio of 8.3%. For the last five years, the System has experienced an annualized dollar weighted rate of return of 13%. A summary of asset allocation and rates of return can be found in the Investment Section of this report.

Letter of Transmittal (Continued)

FUNDING

Funds are derived from the excess additions to plan net assets over deductions from plan net assets. Funds are accumulated by the System in order to meet future benefit obligations to retirees and beneficiaries. The percentage computed by dividing the actuarial value of assets by the actuarial accrued liability is referred to as the "funded ratio." This ratio provides an indication of the funding status of the System and, generally, the greater this percentage, the stronger the System. As of September 30, 1998, the actuarial value of the assets and actuarial accrued liability were \$31,870 million and \$32,137 million respectively, resulting in a funded ratio of 99.2%. As of September 30, 1997, the amounts were \$30,051 million and \$29,792 million respectively. A historical perspective of funding is presented on the Schedule of Funding Progress in the Required Supplementary Information of the Financial Section.

PROFESSIONAL SERVICES

An annual audit of the system was conducted by Andrews, Hooper & Pavlik P.L.C., independent auditors. The auditors' report on the System's financial statements is included in the Financial Section of this report.

Statute requires an annual actuarial valuation be conducted. The purpose of the valuation is to evaluate the mortality, service, compensation and other financial experience of the Retirement System and to recommend employer funding rates for the subsequent year. This annual actuarial valuation was completed by the Segal Company for the fiscal years ended September 30, 1998 and 1997. Actuarial certification and supporting statistics are included in the Actuarial Section of this report.

ACKNOWLEDGMENTS

The preparation of this report was accomplished with the dedication and cooperation of many people. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible stewardship of the funds of the System.

We would, therefore, like to express our appreciation for the assistance given by staff, the advisors and many people who contributed to its preparation. We believe their combined efforts have produced a report that will enable the employer and plan members to better evaluate and understand the Michigan Public School Employees' Retirement System. Their cooperation contributes significantly to the success of MPSERS.

Sincerely,

anet E Phipps, Director

Department of Management and Budget

hustopher M. De Roge

Christopher M. DeRose, Director Office of Retirement Services

9

Administrative Organization

Retirement Board Members

Jack Anson Retiree Member Term Expires March 1, 1999

Thomas Lukshaitis Classroom Teacher Term Expires March 30, 2000

Diana R. Osborn, President Noncertified Support Member/Retiree Term Expires March 30, 2001

Dr. Donald Weatherspoon Representing Arthur E. Ellis State Superintendent of Education Statutory Member

John Cook School System Superintendent Term Expires March 30, 2001

Michael Meyer Community College Admin./Trustee Term Expires March 30, 2000

W. Howard Morris General Public Investments Term Expires March 30, 2000

Robert Reitz General Public Actuary/Health Ins. Term Expires March 30, 2002

Michael E. Casady Finance/Operations Term Expires March 30, 2000

Marsha Smith Classroom Teacher Term Expires March 30, 2001

Dr. Rudy Stefancik Reporting Unit Board of Control Term Expires March 30, 2001

Classroom Teacher Retirant

Administrative Organization

Department of Management and Budget Office of Retirement Services Third Floor, Wing A, General Office Building 7150 Harris Drive P.O. Box 30171, Lansing, Michigan 48909-7671 (517) 322-5103 1-800-381-5111

Advisors and Consultants

Actuary

The Segal Company Michael J. Karlin, F.S.A., M.A.A.A. New York, New York

Auditors

Thomas H. McTavish, C.P.A. Auditor General State of Michigan

Andrews, Hooper & Pavlik P.L.C. Jeffrey J. Fineis, C.P.A. Okemos, Michigan

Investment Manager and Custodian

Douglas B. Roberts State Treasurer State of Michigan

Legal Advisor

Frank J. Kelley Attorney General State of Michigan **Medical Advisors** Gabriel, Roeder, Smith

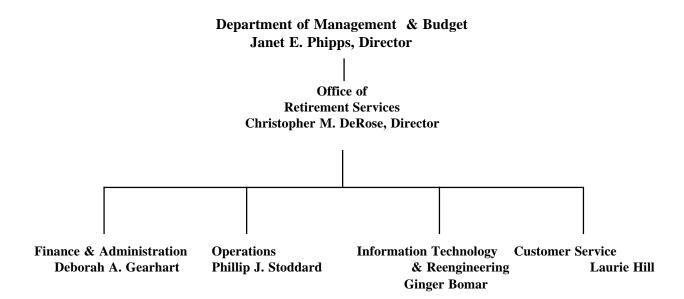
and Company

Investment Performance Measurement Capital Resource Advisors

Chicago, Illinois

Administrative Organization

Organization Chart



Independent Auditors' Report Statements of Plan Net Assets Statements of Changes in Plan Net Assets Notes to Financial Statements Required Supplementary Information Supporting Schedules 4295 Okemos Road, Suite 200 • Okemos, Michigan 48864

Ms. Janet Phipps, Director
Department of Management and Budget
Mr. Thomas H. McTavish, CPA
Auditor General
Michigan Public School Employees
Retirement System Board:

We have audited the accompanying statements of pension plan and postemployment healthcare plan net assets of the Michigan Public School Employees Retirement System, as of September 30, 1998 and 1997, and the related statements of changes in pension plan and postemployment healthcare plan net assets for the years then ended. These financial statements are the responsibility of the management of the Michigan Public School Employees Retirement System. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to in the first paragraph present fairly, in all material respects, the financial position of the Michigan Public School Employees Retirement System, as of September 30, 1998, and 1997, and the changes in plan net assets for the years then ended in conformity with generally accepted accounting principles.

Our audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The required supplementary information and supporting schedules listed in the table of contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements. The required supplementary information and supporting schedules are the responsibility of the System's management. The Schedules of Funding Progress and Employer Contributions and related notes on pages 28 to 30 and the supporting schedules on pages 32 and 33 have been subjected to the auditing procedures applied in our audits of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole. The Year 2000 information on page 31 is not a required part of the basic financial statements but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and do not express an opinion on it. In addition, we do not provide assurance that Michigan Public School Employees Retirement System is or will become year 2000 compliant, that Michigan Public School Employees Retirement System does business are or will become year 2000 compliant.

In accordance with Government Auditing Standards, we have also issued a report dated February 4, 1999 on our consideration of the Michigan Public School Employees Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, and contracts.

andrews Soope & Favlik P.L.C.

February 4, 1999

Statements of Pension Plan and <u>Postemployment Healthcare Plan Net Assets</u>

As of fiscal year end September 30, 1998 and 1997

	As of September 30, 1998			As of September 30, 1997							
	Pension		Health				Pension		Health		
	Plan		Plan		Total		Plan		Plan		Total
Assets:											
Cash	\$ 124,988,748	\$	561,986	\$	125,550,734	\$	122,999,885	\$	530,058	\$	123,529,943
Receivables:											
Amounts due											
from employee							206,193		889		207,082
Amounts due											
from employer	107,310,844		482,500		107,793,344		106,768,151		460,108		107,228,259
Interest and dividends	130,980,034		588,923		131,568,957		138,118,369		595,209		138,713,578
Sale of investments	22,048,030		99,134		22,147,164		32,438,211		139,790		32,578,001
Total receivables	260,338,908		1,170,557		261,509,465		277,530,924		1,195,996		278,726,920
Investments:											
Short-term investments	1,793,827,383		8,065,553		1,801,892,936		2,471,179,113		10,649,338		2,481,828,451
Bonds, notes mortgages											
and preferred stock	7,682,160,180		34,541,156		7,716,701,336		7,609,634,958		32,793,079		7,642,428,037
Common stock	15,430,092,267		69,378,042	1	5,499,470,309	1	4,169,931,065		61,064,121	1	4,230,995,186
Real estate	2,533,422,389		11,390,981		2,544,813,370		1,894,909,032		8,165,950		1,903,074,982
Alternative investments	2,791,912,790		12,553,226		2,804,466,016		1,966,190,781		8,473,133		1,974,663,914
International investments	1,289,063,863		5,795,994		1,294,859,857		1,605,612,241		6,919,250		1,612,531,491
Collateral on											
loaned securities	1,305,957,563		5,871,953		1,311,829,516		1,107,703,717		4,773,556		1,112,477,273
Total investments	32,826,436,435	1	47,596,905	3	2,974,033,340	3	30,825,160,907	1	32,838,427	3	0,957,999,334
Equipment											
(net of depreciation)	0		0		0		1,810		8		1,818
Total assets	33,211,764,091	1	49,329,448	3	3,361,093,539	3	31,225,693,526	1	34,564,489	3	1,360,258,015
Liabilities:											
Warrants outstanding	(7,920,575)		(35,613)		(7,956,188)		(10,031,498)		(43,229)		(10,074,727)
Accounts payable and	(1,4-1,4-1,4-1,4-1,4-1,4-1,4-1,4-1,4-1,4-		(,,		(1)-1-1		(-, ,,		(- , - ,		(3,33 ,4 3,
other accrued liabilities	(101,948,160)		(458,388)		(102,406,548)		(106,013,358)		(456,856)		(106,470,214)
Deferred revenue	(206,339)		(928)		(207,267)		(86,154)		(371)		(86,525)
Obligations under											
securities lending	(1,305,957,563)		(5,871,953)	(1,311,829,516)	((1,107,703,717)	_	(4,773,556)	(1,112,477,273)
Total liabilities	(1,416,032,637)		(6,366,882)	((1,422,399,519)		(1,223,834,727)		(5,274,012)	((1,229,108,739)
Net Assets Held in Trust for											
Pension and Healthcare Benefits*	\$ 31,795,731,454	\$ 14	42,962,566	\$3	1,938,694,020	\$3	30,001,858,799	\$1	29,290,477	\$3	0,131,149,276

^{*}A schedule of funding progress is presented in the Required Supplementary Information in the Financial Section.

The accompanying notes are an integral part of these financial statements.

Statements of Changes in Pension Plan and Postemployment Healthcare Plan Net Assets

For Fiscal Years Ended September 30, 1998 and September 30, 1997

	For year ended September 30, 1998			For year ended September 3 0, 1997			
	Pension	Health		Pension	Heath		
	Plan	Benefits	Total	Plan	Plan	Total	
Additions:							
Members contributions:							
Other	\$ 250,804,095	\$ 27,709,644	\$ 278,513,739	\$ 251,253,698	\$ 25,219,853	\$ 276,473,551	
Military	1,868,341		1,868,341	2,104,592		2,104,592	
Employer contributions:							
Undistributed receipts and other	28,055,510		28,055,510	790,726		790,726	
Colleges, universities and federal	42,957,896	26,162,381	69,120,277	68,807,930	23,409,765	92,217,695	
School districts and other	551,423,616	305,394,739	856,818,355	835,218,857	294,046,018	1,129,264,875	
Investment income:							
Investment income	2,431,213,996		2,431,213,996	5,745,077,832		5,745,077,832	
Securitites lending income	57,140,632		57,140,632	40,667,645		40,667,645	
Less investment expenses							
Real estate operating expenses	(2,156,898)		(2,156,898)	(1,045,076)		(1,045,076)	
Securities lending expenses	(55,312,331)		(55,312,331)	(39,321,794)		(39,321,794)	
Other investment expenses	(21,581,916)		(21,581,916)	(6,921,177)		(6,921,177)	
Interest Income		10,471,271	10,471,271		8,834,244	8,834,244	
Miscellaneous income	1,196		1,196	892		892	
Total additions	3,284,414,137	369,738,035	3,654,152,172	6,896,634,125	351,509,880	7,248,144,005	
Deductions:							
Benefits and refunds paid to plan							
members and beneficiaries							
Retirement benefits	1,454,451,439		1,454,451,439	1,317,828,100		1,317,828,100	
Health benefits		285,446,554	285,446,554		271,980,970	271,980,970	
Dental/vision benefits		38,399,113	38,399,113		36,048,746	36,048,746	
Refund of member contributions	21,575,588	(374,557)	21,201,031	17,835,511	45,539	17,881,050	
Transfers to other systems	51,116		51,116	23,552		23,552	
Administrative expenses	14,463,339	32,594,836	47,058,175	12,102,095	30,584,381	42,686,476	
Total deductions	1,490,541,482	356,065,946	1,846,607,428	1,347,789,258	338,659,636	1,686,448,894	
N. (I	1 702 972 655	12 (72 000	1 907 544 744	5 5 40 0 4 4 0 6 7	12 950 244	5 5 6 1 6 0 5 1 1 1	
Net Increase (Decrease)	1,793,872,655	13,672,089	1,807,544,744	5,548,844,867	12,850,244	5,561,695,111	
Net Assets Held in Trust for Pension	n						
and Healthcare Benefits:	u						
Beginning of Year	30,001,858,799	129,290,477	30,131,149,276	24,453,013,932	116,440,233	24,569,454,165	
resuming or regi.	30,001,030,799	147,470,477	30,131,149,270	24,433,013,932	110,440,233	24,307,434,103	
End of Year*	\$31,795,731,454	\$ 142,962,566	\$31,938,694,020	\$30,001,858,799	\$ 129,290,477	\$30,131,149,276	

^{*} A schedule of funding progress is presented in the Required Supplementary Information in the Financial Section. The accompanying notes are an integral part of these financial statements.

Notes to General Purpose Financial Statements

NOTE 1 - PLAN DESCRIPTION

ORGANIZATION

The Michigan Public School Employees' Retirement System (MPSERS) is a cost-sharing multiple employer, state-wide, defined benefit public employee retirement plan governed by the State of Michigan (State) originally created under Public Act 136 of 1945, recodified and currently operating under the provisions of Public Act 300 of 1980, as amended. MPSERS was established to provide retirement, survivor and disability benefits to the public school employees. There are 718 participating employers. A list of employers is provided in the Statistical Section. MPSERS is a qualified trust fund under section 401(a) of the Internal Revenue Code. By statute, employees of K-12 public school districts, public school academies, district libraries, tax-supported community colleges and seven universities may be members. The seven universities are: Eastern, Central, Northern, Western Michigan, Ferris State, Michigan Technological and Lake Superior State. Employees who first become employed by one of the seven universities on or after January 1, 1996, become members of an alternative plan.

MPSERS' financial statements are included as a pension trust fund in the combined financial statements of the State of Michigan.

MPSERS operates within the Michigan Department of Management and Budget, Office of Retirement Services. The Department Director appoints the Office Director who serves as Executive Secretary to MPSERS' Board, with whom the general oversight of the System resides. The State Treasurer serves as the investment officer and custodian for the System. Public Act 488 of 1996, made changes in the membership of the MPSERS' Board. These changes added two members on January 1, 1997 and two more members on March 31, 1998.

MEMBERSHIP

At September 30, 1998, and 1997, the System's membership consisted of the following.

Retirees and beneficiaries		
currently receiving benefits:	1998	1997
Regular benefits	102,523	98,360
Survivor benefits		9,520
Disability benefits	4,108	3,962
Total		111,842
Current employees: Vested Non-vested Total	182,815	122,302 173,389 295,691
Inactive employees entitled to benefits and not yet receiving them	10,883	9,890
Total All Members	429,519	417,423

Enrollment in the health care fund is voluntary. The number of participants is as follows:

	1998	<u> 1997</u>
Eligible participants	116,620	111,842
Participants receiving benefits:		
Health	95,324	91,964
Dental/Vision	99,103	95,148

Notes to General Purpose Financial Statements

BENEFIT PROVISIONS

Introduction

Benefit provisions of the defined benefit pension plan are established by state statute, which may be amended. Public Act 300 of 1980, as amended, establishes eligibility and benefit provisions for the defined benefit pension plan. Retirement benefits are determined by final average compensation and years of service. Members are eligible to receive a monthly benefit when they meet certain age and service requirements. MPSERS also provides disability and survivor benefits.

A member who leaves Michigan Public School employment may request a refund of his or her member contribution account. Returning members who previously received a refund of their contributions may reinstate their service through repayment of the refund upon satisfaction of certain requirements.

Under the Public School Employees' Retirement Act, all retirees have the option of continuing health, dental and vision coverage. The employer funds health benefits on a pay-as-you-go basis. Retirees with this coverage contribute a portion of the monthly premium amount.

Regular Retirement

The retirement benefit is based on a member's years of credited service (employment) and final average compensation. Final average compensation is the member's highest total wages earned during a specific period of consecutive calendar months divided by the service credit accrued during that same time period. For a Member Investment Plan (MIP) member, the averaging period is 36 consecutive months. For a Basic Plan member this period is the 60 consecutive months yielding the highest total wages. A pension is payable monthly for the lifetime of a retiree and equals 1.5% of a member's final average compensation multiplied by the total number of years of credited service.

A Member Investment Plan member may retire at:

- 1. any age with 30 or more years of credited service; or
- 2. age 60 with 10 or more years of credited service; or
- 3. age 60 with 5 years of credited service provided the member has worked through his or her 60th birthday and has credited service in each of the five school fiscal years immediately preceding the retirement effective date.

A Basic Plan member may retire at:

- 1. age 55 with 30 or more years of credited service; or
- 2. age 60 with 10 or more years of credited service.

There is no mandatory retirement age.

Early Retirement

A member may retire with an early permanently reduced pension:

- 1. after completing at least 15 but less than 30 years of credited service; and
- 2. after attaining age 55; and
- 4. with credited service in each of the 5 school years immediately preceding the pension effective date.

The early pension is computed in the same manner as a regular pension but is permanently reduced 0.5% for each full and partial month between the pension effective date and the date the member will attain age 60.

Deferred Retirement

If a member terminates employment before attaining the age qualification but after accruing 10 or more years of credited service, the member becomes a deferred member and is eligible for a pension at the time the age qualification is attained.

Notes to General Purpose Financial Statements

Non-Duty Disability Benefit

A member with 10 or more years of credited service who becomes totally and permanently disabled due to any non-duty related cause and who has not met the age requirement for a regular pension is eligible for a non-duty disability pension computed in the same manner as an age and service pension, upon recommendation from the member's personal physician and the Retirement Board physician and the approval of the Retirement Board. An Annual Certification of Disability is conducted each January. Upon prior approval, total disability benefits plus authorized outside earnings are limited to 100% of final average compensation (increased by two percent for each year retired).

Duty Disability Benefit

A member who becomes totally and permanently disabled as a result of a duty-related cause, who has not met the age and service requirement for a regular pension, and who is in receipt of Weekly Worker's Compensation is eligible for a duty disability pension computed in the same manner as an age and service pension (but based upon a minimum of 10 years of service) upon recommendation from the member's personal physician and the Retirement Board physician and the approval of the Retirement Board. An Annual Certification of Disability is conducted each January. Upon prior approval, total disability benefits plus authorized outside earnings are limited to 100% of final average compensation (increased by two percent for each year retired).

Forms of Payment

The election of a pension option is made at the time of application. Once a member has retired, the option choice is irrevocable. The pension effective date is the first of the calendar month following the date the member has satisfied the age and service requirements, has terminated public school employment and has the completed application forms on file with the System for a period of 15 days. A retroactive pension can be paid for no more than 12 calendar months. Thus, delay in filing the application can result in a loss of some retroactive pension benefits. An applicant may select only one of the follow options.

<u>Single Life Pension Option 1</u> — Option 1 pays the largest level pension a retiree can receive during his or her lifetime and stops with the month of a retiree's death. There are no monthly benefits for a beneficiary. The pension benefit is computed with no beneficiary rights. If the retiree made contributions while an employee and has not received the total accumulated contributions before death, a refund of the balance of the contributions is made to the beneficiary of record. If the retiree did not make any contributions, there will not be payments to any beneficiaries.

<u>Survivor options (Options 2, 2-E, 3, and 3-E)</u> — Under the Survivor Options 2, 2-E, 3, and 3-E, the reduction is an actuarial determination dependent upon the combined life expectancies of a retiree and a beneficiary, and varies from case to case. A beneficiary may only be a spouse, brother, sister, parent or child (including an adopted child) of a retiring member. If the beneficiary pre-deceases a retiree, the pension will revert to either the Option 1 or 1-E amount ("pop-up" provision).

Option 2 — (100% Survivor Pension) pays a reduced pension to a retiree. The month after a retiree's death the same amount will be paid to a designated beneficiary for the remainder of his or her lifetime.

Option 3 — (50% Survivor Pension) pays a reduced pension to a retiree. The month after a retiree's death, one-half of the Option 3 amount will be paid to the designated beneficiary for the remainder of his or her lifetime.

<u>Equated Plan</u> — The equated plan may be combined with Option 1, 2, or 3 by any member under age 61 except a disability applicant. The equated plan provides a higher pension every month until age 62, at which time the monthly pension is permanently decreased to a lower amount than Option 1, 2, or 3 alone would provide.

The intent of the Equated Plan is for the retiree's pension to decrease at age 62 by approximately the same amount as that person's Social Security benefit will provide. The MPSERS pension until age 62 should be about the same as the combined

Notes to General Purpose Financial Statements

MPSERS pension and Social Security after age 62.

The before-age-62 and after-age-62 amounts used in the Equated Plan are based on an estimated age 62 Social Security benefit table provided by the actuary. The actual projected Social Security pension the retiring member obtains from the Social Security Administration and furnishes to the Retirement System may also be used in the Equated Plan calculation. MPSERS estimates the Social Security pension by using the retiring member's final average earnings, age at retirement and only service performed as a public school employee under this Retirement System. The actual Social Security pension may vary from the estimate.

NOTE: The reduction in the pension at age 62 pertains to the Equated Plan only and affects only the retiree. A beneficiary under Option 2-E or 3-E will receive the Option 2 or 3 amount the month following the retiree's death as if the Equated Plan had not been chosen. A beneficiary does not participate in the Equated Plan.

Survivor Benefit

A non-duty survivor pension is available if a Member Investment Plan participant has 10 years of credited service or, if age 60 or older, five years. The Basic Plan provides a survivor pension with 15 years of credited service or, if age 60 or older, 10 years. An active member may nominate as a survivor beneficiary a spouse, child(ren) (including adopted child(ren)), brother, sister, or a parent. If other than the spouse is nominated and a spouse exists, the spouse must waive this benefit. If no beneficiary has been nominated, the beneficiary is automatically the spouse; or, if there is no spouse, unmarried children under age 18 share the benefit equally until age 18. The benefit is computed as a regular pension but reduced in accordance with an Option 2 (100% survivor pension factor). The pension begins the first of the month following the member's death. In the event of the death of a deferred member, MPSERS begins payment to the nominated beneficiary at the time the member would have attained the minimum age qualification.

A duty survivor pension is payable if weekly Worker's Compensation is being paid to the eligible beneficiary due to the member's death. The spouse receives the benefit (based on a minimum of 10 years of service credit) reduced in accordance with an Option 2 (100% survivor pension factor). If there is no spouse, unmarried children under age 18 share the benefit equally until age 18; if there is no spouse or child(ren), a disabled and dependent parent is eligible.

Post Retirement Adjustments

Member Investment Plan (MIP) recipients receive an annual post-retirement non-compounded increase of three percent of the initial pension in the October following twelve months of retirement. Basic Plan recipients receive a supplemental payment in those years when investment earnings exceed actuarial assumptions.

On January 1, 1990, pre-October 1, 1981, retirees received an increase that ranged from 1% to 22% depending on pension effective date. On October 1, 1990, the base pension of all retirees with an effective pension date of January 1, 1987, or earlier was increased to include all prior post-retirement adjustments.

On January 1, 1986, all recipients through calendar year 1985 received a permanent 8% increase that established the 1986 base pension. In addition, each October, retirees with a pension effective date of January 1, 1987, or earlier receive a fixed increase equal to 3% of the base pension. Both increases are deducted from the distribution of excess investment income, if any. Beginning in 1983, eligible recipients receive an annual distribution of excess investment income, if any.

One time upward adjustments were made in 1972, 1974, 1976, and 1977 for retirees who retired on or after July 1, 1956, and were eligible for Social Security benefits. (Social Security coverage was enacted by referendum in 1956.) The minimum base pension of retirees who were unable to qualify for Social Security through their public school employment (essentially pre-July 1, 1956 retirees), was increased in 1965, 1971, 1972, 1974, and 1981 with a percentage increase granted in 1976 and 1977.

Notes to General Purpose Financial Statements

Member Contributions

Mandatory member contributions were phased out between 1974 and 1977, with the plan remaining noncontributory until January 1, 1987, when the Member Investment Plan (MIP) was enacted.

MIP members enrolled in MIP prior to January 1, 1990, contribute at a permanently fixed rate of 3.9% of gross wages. The MIP contribution rate was 4.0% from January 1, 1987, the effective date of the MIP, until January 1, 1990, when it was reduced to 3.9%. Members first hired January 1, 1990, or later and returning members who did not work between January 1, 1987, through December 31, 1989, contribute at the following graduated permanently fixed contribution rate: 3% of the first \$5,000; 3.6% of \$5,001 through \$15,000; 4.3% of all wages over \$15,000.

Basic Plan members make no contributions. For a limited period ending December 31, 1992, an active Basic Plan member could enroll in the MIP by paying the contributions that would have been made had enrollment occurred initially on January 1, 1987, or on the date of hire, plus interest. MIP contributions at the rate of 3.9% of gross wages begin at enrollment. Market rate interest is posted to member accounts on July 1st on all MIP monies on deposit for 12 months. If a member leaves MPSERS service and no pension is payable, the member's accumulated contributions plus interest, if any, are refundable.

Employer Contributions

The System implemented new employer contribution procedures as a result of implementing the effects of the school finance reform act. Under these new procedures, each school district or reporting entity is required to contribute the full actuarial funding contribution amount to fund pension benefits, plus an additional amount to fund retiree health care benefit amounts on a cash disbursement basis. In prior years each school district or reporting entity contributed 5% of gross wages, with additional amounts from community college, higher educational institutions and federal programs. A table showing the employer contribution rates is included in the Statistical Section of this report.

Other Post Employment Benefits

Retirees have the option of health coverage which is funded on a cash disbursement basis by the employers. The State of Michigan has contracted to provide the comprehensive group medical, hearing, dental and vision coverages for retirees and beneficiaries. All health care benefits are on a self-funded basis. A significiant portion of the premium is paid by MPSERS with the balance deducted from the monthly pension. Public Act 180 of 1996 also authorized payments to the school districts as a one time \$174.5 million reduction in MPSERS reserves for health benefits, which in years prior to 1991 was pre-funded.

Pension recipients are eligible for fully paid Master Health Plan coverage and 90% paid Dental Plan, Vision Plan and Hearing Plan coverage with the following exceptions:

- 1. Retirees not yet eligible for Medicare coverage pay an amount equal to the Medicare Part B premiums.
- 2. Retirees with less than 30 years of service, who terminate employment after October 31, 1980 with vested deferred benefits, are eligible for partially employer paid health benefit coverage (no payment if less than 21 years of service).

Dependents are eligible for 90% employer paid health benefit coverages (partial payment for dependents of deferred vested members who had 21 or more years of service).

Notes to General Purpose Financial Statements

The number of participants and other revelant financial information are as follows:

	1998	1997
Health, Dental and Vision Plan:		
Eligible participants	116,620	111,842
Participants receiving benefits:		
Health	95,324	91,964
Dental/Vision	99,103	95,148
Expenses for the year	\$356,065,946	\$338,659,636
Payroll contribution rate	3.98%	3.95%

The only requirements for health benefits are that the retiree or beneficiary make application and be in receipt of a monthly pension. Applications for enrollment after retirement are accepted anytime during the year, with coverage effective six months following the receipt of the application.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting and Presentation

MPSERS' financial statements are prepared using the accrual basis of accounting. Contributions from the employers are recognized as revenue in the period in which employees provide service. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

Reserves

Reserve for Employees' Contributions — Members no longer contribute to this reserve except to purchase eligible service credit or repay previously refunded contributions. This reserve represents active member contributions and interest less amounts transferred to the Reserve for Retired Benefit Payments for regular and disability retirement, amounts refunded to terminated members, and amounts transferred to the Employers' Contribution Reserve representing unclaimed funds. At September 30, 1998, and 1997, the balance in this account was \$738 million and \$776 million respectively.

<u>Reserve for Member Investment Plan</u> — This reserve represents MIP contributions and interest less refunds and transfers to the Reserve for Retired Benefit Payments. At September 30, 1998, and 1997, the balance in this account was \$2 billion and \$1.7 billion respectively.

Reserve for Employer Contributions — All reporting unit contributions, except payments for health benefits, are credited to this reserve. Interest from the Reserve for Undistributed Investment Income account is credited annually. Amounts are transferred annually to the Reserve for Retired Benefit Payments to bring the balance of that reserve into balance with the actuarial present value of retirement allowances. At September 30, 1998, and 1997, the balance in this account was \$3.6 billion and \$3.0 billion respectively.

Reserve for Retired Benefit Payments — This represents the reserves for payment of future retirement benefits to current retirees. At retirement, a member's accumulated contributions plus interest are transferred into this reserve. Monthly benefits, which are paid to the retiree, reduce this reserve. At the end of each fiscal year, an amount, determined by an annual actuarial valuation, is transferred from the Reserve for Employer Contributions to bring the balance of this reserve into balance with the actuarial present value of retirement allowances. At September 30, 1998, and 1997, the balance in

Notes to General Purpose Financial Statements

this account was \$14.5 billion and \$14.6 billion respectively.

Reserve for Undistributed Investment Income and Reserve for Administrative Expenses — The Reserve for Undistributed Investment Income account is credited with all investment earnings. Interest is transferred annually to the other reserves. Administrative expenses of the retirement system are paid from the Reserve for Administrative Expense, which is credited with amounts from the Reserve for Undistributed Investment Income to cover the expenses. For ease of reporting and understanding, the two reserves are presented as one reserve in the supporting schedules. At September 30, 1998, and 1997, the balance in this account was \$10.9 billion and \$9.9 billion respectively. The balance of this reserve includes the balance of the Stabilization Subaccount.

Stablization Subaccount

Under Public Act 143, effective November 19, 1997, the actuarial value of assets was set at market at September 30, 1997, with the 5 year smoothing of investments gains or losses applied prospectively. Also, the inflation component of the salary scale was reduced from 5% to 4%. The act also established a stablization subaccount of the Reserve for Undistributed Investment Income (income fund) to which any overfunding is credited. As of October 1, 1997, the balance in the subaccount was \$259 million. The balance in the subaccount is included in the balance of the income fund and in pension plan net assets.

Reserve for Health Benefits — This fund is credited with employee and employer contributions for retirees' health, dental and vision benefits. Health, dental and vision benefits are paid from this fund. The Retirement System pays 90% of the monthly premium, membership, or subscription fee for health, dental, vision and hearing benefits. At September 30, 1998, and 1997, the balance in this account was \$143 million and \$129.3 million respectively.

Fair Value of Investments

Plan investments are reported at fair value, except for short-term investments. Short-term investments are carried at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Corporate bonds not traded on a national or international exchange are based on equivalent values of comparable securities with similar yield and risk. Real estate debt is valued on the basis of future principal and interest payments, and is discounted at prevailing interest rates for similar instruments. The fair value of real estate investments is based on independent appraisals. Other investments that do not have an established market are recorded at estimated fair value.

Reporting Entity

MPSERS is a pension trust fund of the State of Michigan. As such, MPSERS is considered part of the State and is included in the State's comprehensive annual financial report as a pension trust fund. MPSERS and the MPSERS' board are not financially accountable for any other entities or other organizations. Accordingly, MPSERS is the only entity included in this financial report.

Investment Income

Dividend income is recognized based on the ex-dividend date and interest income is recognized on the accrual basis as earned. Fair value changes are recorded as investment income or loss. Purchases and sales of investments are recorded as of the trade date (the date upon which the transaction is initiated), except for purchase and sale of mortgages, real estate, and alternative investments which are recorded as of the settlement date (the date upon which the transaction is ultimately completed). The effect of recording such transactions as of the settlement date does not materially affect the financial statements.

Notes to General Purpose Financial Statements

Property and Equipment

Office space is leased from the State on a year to year basis. Office equipment is capitalized if the value exceeds \$5,000. These assets are recorded at cost and are reported net of depreciation in the Statement of Pension Plan and Postemployment Healthcare Plan Net Assets. Such assets are depreciated on a straight line basis over 10 years. As of September 30, 1998, all capitalized equipment was fully depreciated.

Related Party Transactions

<u>Leases and services</u> — The Retirement System leases operating space and purchases certain administrative, data processing, legal and investment services from the State. The space and services are not otherwise available by competitive bid. The following summarizes costs incurred by MPSERS for such services.

	<u>1998</u>	<u>1997</u>
Building rentals	\$ 410,702	\$ 287,423
Data processing services	3,403,486	1,672,588
Legal	62,238	110,957

<u>Common Cash</u> — The cash account includes \$125,550,734 and \$123,529,943 on September 30, 1998, and 1997, respectively, which represents funds deposited in a common cash investment pool maintained for various State operating funds. The participating funds in the common cash pool earn interest at various rates depending upon prevailing short-term interest rates. Earnings from these activities amounted to \$6,436,399 and \$7,959,886 for the years ended September 30, 1998, and 1997, respectively.

Reclassification of Prior Year Amounts

Certain prior year amounts have been reclassified or restated to conform with the current year presentation.

NOTE 3 - CONTRIBUTIONS

The majority of MPSERS members currently participate on a contributory basis. Reporting units are required by Public Act 300 of 1980, as amended, to contribute amounts necessary to finance the coverage of members. Contribution provisions are specified by state statute and may be amended only by action of the state legislature.

Employer contributions to MPSERS are determined on an actuarial basis using the entry age normal actuarial cost method. Under this method, the actuarial present value of the projected benefits of each individual included in the actuarial valuation is allocated on a level basis over the service of the individual between entry age and assumed exit age. The portion of this cost allocated to the current valuation year is called the normal cost. The remainder is called the actuarial accrued liability. Normal cost is funded on a current basis. The contribution rate for unfunded service rendered before the valuation date, the unfunded actuarial accrued liability contribution rate, is amortized over a period of 40 years (38 years remaining).

Actual employer contributions for retirement benefits were \$622,254,551 and \$904,165,262 representing 7.5% and 11.3% of reported annual payroll, for the years ended September 30, 1998, and 1997, respectively. Required employer

Notes to General Purpose Financial Statements

contributions for pensions included:

- 1. \$845,875,061 and \$923,480,135 for fiscal years 1998 and 1997, respectively, for normal cost of pensions representing 10.54% and 11.83%, respectively, of annual covered payroll.
- 2. \$ -0- and \$251,805,561 for fiscal years 1998 and 1997, respectively, for amortization of unfunded actuarial liability, representing 0.0% and 3.23%, respectively, of annual covered payroll.

The System is required to reconcile with actuarial requirements annually. Any funding excess or deficiency is included in the subsequent years contribution, and is not recognized as a payable or receivable in the accounting records. Based on this reconciliation and other adjustments, the differences are smoothed over 5 years.

In May 1996, the Internal Revenue Service issued a private letter ruling allowing MPSERS members to purchase service credit and repay refunds using tax-deferred (pre-tax) dollars. The program was implemented in school year 98-99.

NOTE 4 - INVESTMENTS

Investment Authority

Under Public Act 380 of 1965, as amended, the authority for the purchase and the sale of investments resides with the State Treasurer. Investments are made subject to the Michigan Public Pension Investment Act, Public Act 314 of 1965, as amended. The Michigan Public Pension Investment Act authorizes, with certain restrictions, the investment of pension fund assets in stock, corporate and government bonds and notes, mortgages, real estate, and certain short-term and alternative investments. Investments must be made for the exclusive purposes of providing benefits to active members, retired members and beneficiaries, and of defraying the expenses of investing the assets.

Under Public Act 314 of 1965, as amended, the State Treasurer may invest up to 5% of the System's assets in alternative investments and up to 15% of the System's assets in investments not otherwise qualified under the act. Alternative investments include limited partnerships and distributions from these partnerships in the form of bonds, preferred stock and common stock.

Derivatives

The State Treasurer does not employ the use of derivatives in the investment of the Common Cash or the investment of trust funds other than the pension trust funds.

Derivatives are used for a small amount of the pension trust fund portfolios. However, derivatives are not used for speculation and they are not used to leverage the investment portfolios. Less than 6% of the total pension trust fund's portfolio has been invested from time to time in future contracts, collateralized mortgages and swap agreements. Swap agreements represent the largest category of derivatives used and represented 4.1% of the total portfolio at market values.

To further diversify the pension fund's portfolio into international equities, the State Treasurer has entered into swap agreements with investment grade counterparties which are tied to stock market indices in eighteen foreign countries. The notional amounts of the swap agreements at September 30, 1998, and 1997, were \$1,320.8 million and \$1,340.6 million, respectively. One half of the notional amount is hedged against foreign currency fluctuations. The swap agreements provide that the retirement systems will pay quarterly, over the term of the swap agreements, interest indexed to the three month London Inter Bank Offer Rate (LIBOR), adjusted for an interest rate spread, on the notional amount stated in the

Notes to General Purpose Financial Statements

agreements. At the maturity of the swap agreements the pension fund will either receive the increase in the value of the international equity indices from the level of the indices at the inception of the agreements, or pay the decrease in the value of the indices. Swap agreement maturities range from October 1998 to December 2001.

U. S. domestic LIBOR based floating rate notes were purchased in the open market to correspond with the notional amount of the swap agreements. The State Treasurer maintains custody and control of these notes.

The value of these synthetic equity structures is a combination of the value of the swap agreements and the value of the notes. The book value represents the cost of the notes. The current value represents the current value of the notes and the change in value of the underlying indices from the inception of the swap agreements. The current value is used as a representation of the fair value based upon the intention to hold all swap agreements until maturity. Since the inception of the international equity investment program, over \$376.3 million of gains on international equity exposure and excess interest received have been realized. The unrealized loss of \$52.2 million at September 30, 1998 reflects the decrease in international indices and higher notional cost levels following realization of gains in the months prior to September.

The respective September 30, 1998 and 1997 values are as follows:

	Notional Amount	Book Value	Current Value
9/30/98 (dollars in millions)	\$1,320.8	\$1,347.1	\$1,294.9
9/30/97 (dollars in millions)	1,340.6	1,327.6	1,612.5

Investments Exceeding 5% of Plan Net Assets

MPSERS did not hold an individual investment (other than U.S. Government securities) that exceeded 5% of net assets available for benefits at September 30, 1998 or 1997.

Securities Lending

State statutes do not prohibit the retirement system from participating in securities lending transactions, and the retirement system has, via a Securities Lending Authorization Agreement, authorized the agent bank to lend its securities to broker-dealers and banks pursuant to a form of loan agreement.

During the fiscal year, the agent bank lent, at the direction of the retirement system, the retirement system's securities and received cash (United States and foreign currency), securities issued or guaranteed by the United States government, sovereign debt rated A or better, convertible bonds, and irrevocable bank letters of credit issued by a person other than the borrower or an affiliate of the borrower as collateral. The agent bank did not have the ability to pledge or sell collateral securities delivered absent a borrower default. Borrowers were required to deliver collateral for each loan equal to: (i) in the case of loaned securities denominated in United States dollars or whose primary trading market was located in the United States or sovereign debt issued by foreign governments, 102% of the market value of the loaned securities; and (ii) in the case of loaned securities not denominated in United States dollars or whose primary trading market was not located in the United States, 105% of the market value of the loaned securities.

The retirement system did not impose any restrictions during the fiscal year on the amount of the loans that the agent bank made on its behalf. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the fiscal year. Moreover, there were no losses during the fiscal year resulting from a default of the borrowers or the agent bank.

Notes to General Purpose Financial Statements

During the fiscal year, the retirement system and the borrowers maintained the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested, together with the cash collateral of other qualified tax-exempt plan lenders, in a collective investment pool. As of September 30, 1998, such investment pool had an average duration of 64 days and an average weighted maturity of 504 days. Because the loans were terminable at will, their duration did not generally match the duration of the investments made with cash collateral. On September 30, 1998, the retirement system had no credit risk exposure to borrowers. The collateral held and the market value of securities on loan for the retirement system as of September 30, 1998, were \$1,357,084,675 and \$1,305,048,404 respectively.

Gross income from security lending for the fiscal year was \$57,140,632. Expenses associated with this income amounted to \$54,703,111 for the borrower's rebate and \$609,220 for fees paid to the agent.

Categories of Investment Risk

Investments made by the fund, including repurchase agreements and information concerning reverse repurchase agreements, are summarized below. The investments that are represented by specific identifiable investment securities are classified as to credit risk in three categories.

Category 1 includes investments insured, registered, or held by MPSERS or its agent in MPSERS' name. Category 2 includes uninsured and unregistered investments held by the counterparty's trust department or agent in MPSERS' name. Category 3 includes uninsured and unregistered investments held by the counterparty, its trust department, or agent, but not in MPSERS' name.

At September 30, 1998, all investments of the pension trust fund were classified as Category 1, except for certain investments not categorized. The following table summarizes the investments at market value:

Category 1	1998	1997		
Prime Commercial Paper	\$ 1,392,660,520	\$ 1,954,462,296		
Short Term Note	409,232,416	527,366,155		
Government Securities	3,259,756,927	3,823,912,591		
Corporate Bonds & Notes	3,235,604,735	2,917,257,555		
Convertible Bonds	0	14,544,496		
Preferred Stock	881,383	419,711		
Equities	15,012,352,064	13,730,558,820		
Real Estate	231,071,103	208,291,676		
Alternative Investments	104,516,117	96,277,818		
Derivatives (International)	1,294,859,857	1,612,531,491		
Total Category 1	\$ 24,940,935,122	\$ 24,885,622,609		
Non-Categorized				
Private Placements	\$ 337,984,950	\$ 126,539,374		
Mortgages	108,701,854	178,817,127		
Real Estate	2,313,742,267	1,694,783,306		
Alternative Investments	2,699,949,899	1,878,386,096		
Cash Collateral	1,311,829,516	1,112,477,273		
Securities on Loan:				
Government Securities	708,606,557	576,966,259		
Corporate Bonds & Notes	65,164,930	3,970,924		
Equities	487,118,245	500,436,366		
Total Non-Categorized	\$ 8,033,098,218	\$ 6,072,376,725		
Grand Total	\$32,974,033,340	\$ 30,957,999,334		

Notes to General Purpose Financial Statements

NOTE 5 — COMMITMENTS AND CONTINGENCIES

Under the Administrative Procedures Act, members may appeal a decision made by the Board. Once the administrative procedure has been exhausted, the decision may be appealed in Michigan's court system. Various cases that have exhausted the administrative procedures have been appealed in the court system. These cases are in the normal course of business and the System does not anticipate any material loss as a result of the contingent liabilities.

Required Supplementary Information

Schedule of Funding Progress

Expressing the net assets available for benefits as a percentage of the actuarial accrued liability provides one indication of MPSERS' funding status. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the System. Trends in unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the underfunded or overfunded actuarial accrued liability as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the system.

Retirement Benefits (\$ in Millions)

Valuation Date Sept 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded (Overfunded) Accrued Liability e (UAAL)(b-a)	Funded Ratio AAL (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
1989*	\$12,971	\$ 14,382	\$ 1,411	90.2 %	\$ 5,403	26.1 %
1990	13,746	15,766	2,020	87.2	5,818	34.7
1991	14,653	18,032	3,379	81.3	6,248	54.1
1992	15,333	19,563	4,230	78.4	6,592	64.2
1993#	16,999	21,699	4,700	78.3	7,070	66.5
1994	18,503	23,500	4,997	78.7	7,344	68.0
1994 [@]	18,503	25,014	6,511	74.0	7,344	88.7
1995	20,455	27,402	6,947	74.6	7,565	91.8
1996	22,529	28,571	6,042	78.9	7,807	77.4
1997	25,485	30,179	4,694	84.4	8,027	58.5
1997**	30,051	29,792	(259)	100.9	8,027	(3.2)
1998	31,870	32,137	267	99.2	8,265	3.2

^{*} Benefits changes and revised actuarial assumptions.

[#] Revised asset valuation method

[@] Revised actuarial assumptions

^{**} Revised actuarial assumptions and revised asset valuation method

Required Supplementary Information

Schedule of Employer Contributions

Fiscal Year Ended Sept. 30	Actuarial Required Contribution (ARC)	Actual Contributions	Percentage Contributed
1989	\$432,812,340	\$424,632,187	98.11%
1990	448,009,100	472,111,990	105.38
1991	503,604,920	502,698,431	99.82
1992	572,914,320	533,039,483	93.04
1993	635,531,820	612,207,802	96.33
1994	630,940,900	809,749,551	128.34
1995	810,994,850	770,526,207	95.01
1996	866,813,250	829,626,962	95.71
1997	923,480,135	904,165,262	97.91
1998	845,875,061	622,254,551	73.56

Notes to Required Supplemental Information

NOTE A - DESCRIPTION

Ten year historical trend information designed to provide information about MPSERS' progress made in accumulating sufficient assets to pay benefits when due is presented in the preceding schedules. Other ten year historical trend information related to the pension plan is presented in the Statistical and Actuarial Sections of the report. This information is presented to enable the reader to assess the progress made by MPSERS in accumulating sufficient assets to pay pension benefits as they become due.

The comparability of trend information is affected by changes in actuarial assumptions, benefit provisions, actuarial funding methods, accounting policies, and other changes. Those changes usually affect trends in contribution requirements and in ratios that use the pension benefit obligation as a factor.

The Schedule of Funding Progress and Schedule of Employer Contributions are reported as historical trend information. The Schedule of Funding Progress is presented to measure the progress being made to accumulate sufficient assets to pay benefits when due. The Schedule of Employer Contributions is presented to show the responsibility of the Employer in meeting the actuarial requirements to maintain the System on a sound financial basis.

NOTE B - SUMMARY OF ACTUARIAL ASSUMPTIONS

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows.

> Valuation Date 09/30/98 Actuarial Cost Method Entry Age Normal Amortization Method Level Percent of Payroll, Closed Remaining Amortization Period 38 years Asset Valuation Method 5-Year Smoothed Market Value

Actuarial Assumptions:

Inflation Rate 4% Investment Rate of Return 8% Projected Salary Increases 4-16.5% Cost-of-Living Adjustments

3% annual non-compounded for MIP members

Required Supplementary Information (Continued)

YEAR 2000

In October 1998, the Governmental Accounting Standards Board (GASB) issued Technical Bulletin 98-1, entitled *Disclosures about Year 2000 Issues*. The provisions of the GASB technical bulletin, as amended by Technical Bulletin 99-1, require the System to make disclosures about its readiness in addressing year 2000 issues for its computer systems and other electronic equipment.

The year 2000 issue is the result of shortcomings in the manner in which "year" information is stored and interpreted by many electronic data processing systems and other electronic equipment. Operations may be adversely affected if critical systems and equipment are not made year 2000 compliant. The year 2000 issue will impact not only internal operations, but also interactions with external parties such as other governmental entities and critical vendors. To address the year 2000 issues, the State established the Year 2000 Project Office within the Department of Management and Budget (DMB). The Year 2000 Project Office's mission is to lead, support, and facilitate achievement of year 2000 compliance throughout the state's executive branch to ensure uninterrupted service to Michigan's citizens. The Year 2000 Project Office is monitoring year 2000 compliance efforts at the various agencies and is providing assistance and assigning resources to accelerate compliance for all mission critical systems and equipment. Additional disclosure regarding the status of statewide systems year 2000 compliance efforts upon which MPSERS is dependent can be found in the State of Michigan's Comprehensive Annual Financial Report.

MPSERS' in conjunction with the Year 2000 Project Office, DMB, is subjecting those systems and equipment to the following stages of work to address year 2000 issues:

Awareness stage — Establishing a budget and project plan for dealing with the year 2000 issue.

Assessment stage — Identifying the systems and components for year 2000 compliance.

Remediation stage — Making changes to systems and equipment.

Validation/testing stage — Validating and testing the changes that were made during the remediation stage.

MPSERS has identified the computer systems and electronic equipment that are critical to its operations, and the following is a summary of progress towards achieving year 2000 compliance:

Internal Systems:

Common Pension Payroll, ARS and ARMS--MPSERS has completed the assessment, remediation, validation and testing stages of these systems. In addition, in 1999 there will be additional testing on these systems and other non-critical systems.

As of year-end, MPSERS has a commitment to spend approximately \$684 thousand to make critical computer systems and equipment year 2000 compliant.

External Factors:

There can be no assurance that organizations and governmental agencies with which MPSERS interacts, including banks, vendors, customers, state and federal governments will be year 2000 compliant. With regard to these external organizations, MPSERS is currently in the process of obtaining assurances that their systems will be ready for the year 2000. If issues are identified, action plans will be instituted as necessary. However, even if the systems of both are compliant in a timely manner, problems could arise with communications between systems if compliance is achieved through inconsistent approaches or methodologies.

Because of the unprecedented nature of the year 2000 issue, its effects and the success of related remediation efforts will not be fully determinable until the year 2000 and thereafter. Management cannot assure that MPSERS is or will be year 2000 ready, or that MPSERS' remediation efforts have been successful in whole or in part. However, management believes that it has instituted a plan to minimize the impact that the year 2000 issue may have on critical operations.

Supporting Schedules

Comparative Summary Schedule of Pension Plan Administrative Expenses for the Years Ended September 30, 1998 and 1997

	1998	1997
Personnel Service:		
Staff salaries	\$ 4,008,607	\$ 3,335,232
Retirement and social security	769,138	801,833
Other fringe benefits	546,028	517,703
Total	5,323,773	4,654,768
Professional Services:		
Actuarial	310,126	114,743
Accounting, records management and mail	1,394,463	1,008,881
Data processing	3,403,486	1,672,588
Legal	62,238	110,957
Audit	41,370	36,638
Medical	91,379	74,571
Medical insurance research	0	434,067
Total	5,303,062	3,452,445
Building and Equipment:		
Building rentals	410,702	287,423
Equipment purchase, maintenance and rentals	116,797	313,244
Depreciation	1,818	1,818
Total	529,317	602,485
Miscellaneous:		
Customer Information Center	133,720	88,230
Office administrative support	250,222	250,442
Department administrative support	74,080	861,848
Travel and board meetings	46,556	60,640
Postage, telephone and other	2,802,609	2,131,237
Total	3,307,187	3,392,397
Total Administrative Expenses	\$ 14,463,339	\$ 12,102,095
		

Supporting Schedules (Continued)

Schedule of Investment Expenses

	1998	1997
Real Estate	\$ 2,156,898	\$ 1,045,076
Securities Lending Expense	55,312,331	39,321,794
Other Investment Expenses	21,581,916	6,921,177
Total Investment Expenses	\$_79,051,145	<u>\$ 47,288,047</u>

Schedule of Payments to Consultants

	1998	1997
Independent Auditors Medical Advisor Actuary	\$ 41,370 91,379 310,126	\$ 36,638 74,571 114,743
Total Payments	\$ <u>442,875</u>	\$ 225,952

Supporting Schedules (continued)

Detail of Changes in Plan Net Assets (Pension and Postemployment Healthcare Benefits) For the Year Ended September 30, 1998

	Employee Contributions		Member Investment Plan		Employer Contributions		Retired Benefit Payments		Undistributed Investment Income		Health Benefits		Total	
Additions:														
Members contributions:														
Other	\$	34,770,262	\$	216,033,833							\$	27,709,644	\$	278,513,739
Military		1,868,341												1,868,341
Employer contributions:														
Undistributed receipts and other					\$	27,873,039			\$	182,471				28,055,510
Colleges, universities and federal						42,957,896						26,162,381		69,120,277
School districts and other						551,423,616						305,394,739		856,818,355
Investment income:														
Investment income										2,431,213,996				2,431,213,996
Securitites lending income										57,140,632				57,140,632
Less investment expenses														
Real estate operating expenses										(2,156,898)				(2,156,898)
Securities lending expenses										(55,312,331)				(55,312,331)
Other investment expenses										(21,581,916)				(21,581,916)
Interest Income												10,471,271		10,471,271
Miscellaneous income						į.				1,196				1,196
Total additions		36,638,603		216,033,833		622,254,551				2,409,487,150		369,738,035		3,654,152,172
Deductions:														
Benefits and refunds paid to plan														
members and beneficiaries														
Retirement benefits							\$	1,454,451,439						1,454,451,439
Health benefits												285,446,554		285,446,554
Dental/vision benefits												38,399,113		38,399,113
Refund of member contributions		1,877,300		8,676,472		11,021,816	4					(374,557)		21,201,031
Transfers to other systems		51,116												51,116
Administrative expenses										14,463,339		32,594,836		47,058,175
Total deductions		1,928,416		8,676,472		11,021,816		1,454,451,439		14,463,339		356,065,946		1,846,607,428
Net Increase (Decrease)		34,710,187		207,357,361		611,232,735		(1,454,451,439)		2,395,023,811		13,672,089		1,807,544,744
Other Changes in Net Assets:		3-4,710,107		207,337,301		011,232,730		(1,101,102,102)		_,0,0,0_0,011		,,		.,,.
Interest allocation		32,373,300		197,771,974		250,451,106		1,122,472,952		(1,603,069,332)				
Transfers upon retirement		(105,125,939)		(113,297,847)		250,451,100		218,423,786		(1,000,000,002)				
Transfer - stabilization account		(103,123,939)		(113,291,041)		(259,050,967)		210,123,700		259,050,967				
		(72,752,639)		84,474,127		(8,599,861)		1,340,896,738		(1,344,018,365)		·····		
Total other changes in net assets		(72,732,039)		04,474,127		(0,377,001)		1,540,650,750		(1,5+1,010,505)				
Net Increase (Decrease)		(38,042,452)		291,831,488		602,632,874		(113,554,701)		1,051,005,446		13,672,089		1,807,544,744
After Other Changes Net Assets Held in Trust for Pensio	. 71	(30,042,432)		271,031,400		002,032,074		(113,337,701)		1,031,003,110		15,072,005		2,007,011,777
and Healthcare Benefits:	711					<u> </u>								
		775,737,461		1,723,811,121		2,954,547,948		14,648,925,722		9,898,836,547		129,290,477		30,131,149,276
Beginning of Year		773,737,401		1,723,011,121		2,737,371,770		1 1,040,723,722	_	2,020,030,341		125,250,777		- 5,202,2.0,270
End of Year	\$	737,695,009	\$	2,015,642,609	\$	3,557,180,822	\$	14,535,371,021	\$	10,949,841,993	\$	142,962,566	\$	31,938,694,020

Supporting Schedules (continued)

Detail of Changes in Plan Net Assets (Pension and Postemployment Healthcare Benefits)
For the Year Ended September 30, 1997

For the Year Ended Sept	Employee	Member Investment	Employer	Retired Benefit	Undistributed Investment	Health	
	Contributions	Plan	Contributions	Payments	Income	Benefits	Total
Additions: Members contributions:							
Other	\$ 38,824,188	\$ 212,429,510				\$ 25,219,853	\$ 276,473,551
Military	2,104,592	\$ 212,429,310				\$ 25,219,853	
Employer contributions :	2,104,392						2,104,592
Undistributed receipts and other			\$ 138,475		\$ 652,251		790,726
Colleges, universities and federal			68,807,930		\$ 032,231	23,409,765	92,217,695
School districts and other		,	835,218,857		,	294,046,018	1,129,264,875
nvestment income:			655,216,657			294,040,018	1,129,204,873
Investment income					5,745,077,832		5 745 077 922
Securitites lending income			``				5,745,077,832
. •					40,667,645		40,667,645
Less investment expenses					(1.045.05()		4 0 4 7 0 7 6
Real estate operating expenses					(1,045,076)		(1,045,076
Securities lending expenses					(39,321,794)		(39,321,794
Other investment expenses					(6,921,177)		(6,921,177
Interest Income					A	18,834,244	8,834,244
Aiscellaneous income					892		892
Total additions	40,928,780	212,429,510	904,165,262		5,739,110,573	351,509,880	7,248,144,005
eductions:							
Benefits and refunds paid to plan							
members and beneficiaries							
Retirement benefits				\$ 1,317,828,100			1,317,828,100
Health benefits					,	271,980,970	271,980,970
Dental/vision benefits						36,048,746	36,048,746
Refund of member contributions	2,518,641	9,016,685	6,296,281	3,904		45,539	17,881,050
Transfers to other systems	23,552	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*,=**,=**	2,501		10,000	23,552
Administrative expenses				j	12,102,095	30,584,381	42,686,476
Total deductions	2,542,193	9,016,685	6,296,281	1,317,832,004	12,102,095	338,659,636	1,686,448,894
Net Increase (Decrease)	38,386,587	203,412,825	897,868,981	(1,317,832,004)	5,727,008,478	12,850,244	5,561,695,111
Other Changes in Net Assets:	30,300,307	203,412,623	377,000,701	(1,517,652,004)	3,727,000,470	12,030,244	3,301,093,111
Interest allocation	150,820,491	33,390,460	135,224,424	958,194,685	(1 277 620 060)		
Transfers upon retirement	(83,251,016)	(104,363,237)	155,224,424		(1,277,630,060)		
Transfer - stabilization account	(83,231,010)	(104,303,237)		187,614,253			
			(1.220.640.000)	1 220 640 000			
Transfers of employer shares	67.560.475	(70,070,777)	(1,228,648,898)	1,228,648,898	(1.055,600,060)		
Total other changes in net assets	67,569,475	(70,972,777)	(1,093,424,474)	2,374,457,836	(1,277,630,060)		
et Increase (Decrease)							
After Other Changes	105,956,062	132,440,048	(195,555,493)	1,056,625,832	4,449,378,418	12,850,244	5,561,695,111
et Assets Held in Trust for Pensio	n						
and Haalthaana Damaeta.							
and Healthcare Benefits:							
eginning of Year	669,781,399	1,591,371,073	3,150,103,441	13,592,299,890	5,449,458,129	116,440,233	24,569,454,165

Report on Investment Activity
Asset Allocation
Investment Results
List of Largest Stock Holdings
List of Largest Bond Holdings
Schedule of Investment Fees
Schedule of Commissions
Investment Summary

Report on Investment Activity

INTRODUCTION

The State Treasurer reports quarterly the investment activity to the Investment Advisory Committe ("IAC") which reviews the investments, goals and objectives of the retirement funds and may submit recommendations regarding them to the State Treasurer. The Investment Advisory Committee may also, by a majority vote, direct the State Treasurer to dispose of any holdings which, in the committee's judgement, are not suitable for the funds involved, and may, by unanimous vote, direct the State Treasurer to make specific investments.

The IAC was created by Act 380 of the Public Acts of 1965. The three public members of the five-member committee are appointed by the Governor with the advice and consent of the Senate for three-year terms. The Director of the Department of Consumer and Industry Services and the Director of the Department of Management and Budget are ex-officio members. The members of the IAC are as follows: Mr. Samuel Valenti III (public member), Farris W. Womack (public member), Jerry L. Tubergen (public member), Kathleen M. Wilbur (ex-officio member), and Janet E. Phipps (ex-officio member). The public members serve without pay, but are paid actual and necessary travel and other expenses.

INVESTMENT POLICY & GOAL

The primary function of the MPSERS is to provide retirement, survivor and disability benefits to its members. The State Treasurer is the sole investment fiduciary and custodian of the systems investment pursuant to state law. The primary investment objective is to maximize the rate of return on the total investment portfolio, consistent with a high degree of prudence and sufficient diversity to eliminate inordinate risks and to meet the actuarial assumption for the investment rate of return, at a reasonable cost achieved by cultivating a motivated team of dedicated professionals. The goals of the fund are:

- 1. To outperform the actuarial assumption over the long-term.
- 2. To produce competitive results at a low cost.
- 3. To achieve a delicate balance between risk and return.
- 4. To perform in the top half of the Capital Resource Advisors public plan universe.
- 5. To exceed individual asset class benchmarks over the long-term.

The strategy for achieving these goals is carried out by investing the assets of the system according to a five year asset allocation model which currently has seven different asset classes which provides for a well diversified portfolio.

	Asset Alle	ocation
Investment Category	As of 9/30/98 Actual %	_Target %
Mortgages	0.3%	0.0%
International Equity	4.1%	7.5%
Real Estate	8.0%	8.5%
Alternative Investments	8.8%	7.5%
Short Term Investments	6.0%	1.5%
Fixed Income	24.0%	25.5%
Domestic Equity	48.8%	49.5%
TOTAL	_100.0%	100.0%

Report on Investment Activity

STATE LAW

Pursuant to State Law (Section 91 of Act No. 380 of the Public Acts of 1965, as amended), the State Treasurer, State of Michigan, is the investment fiduciary for the following four State sponsored retirement systems: Michigan Public School Employees' Retirement System; Michigan State Employees' Retirement System; Michigan State Police Retirement System; and Judges' Retirement System.

Act No. 314 of the Public Act of 1965, as amended, authorizes the investment of assets of public employee retirement systems or plans created and established by the state or any political subdivision.

PROXY VOTING POLICY

MPSERS' Proxy Voting Policy sets forth directives on the following issues: Board of Directors, Corporate Governance, Social Issues, corporate restructurings and defenses. All proxies are reviewed and voted in accordance with the above mentioned items.

INVESTMENT RESULTS

Total Portfolio Result

For the fiscal year ended September 30, 1998, the total portfolio returned 8.3%, compared to the median of 6.6% of state plans, including MPSERS, as compiled by Capital Resource Advisors. For the three year period the fund returned 15.5%, and for the five-year period the fund returned 13.0%. This compares with the median fund return of 12.9% for the three-year period and 11.9% for the five-year period.

During the fiscal year ending September 30, 1998, the nation's economy was characterized by full employment, low inflation, declining interest rates, and moderate economic growth. The equity markets experienced a significant correction in the quarter ending September 30, 1998. The S&P 500 was off 9.9% while the Dow Jones Industrial Average fell 12.0% during this time frame. This tended to reduce the one-year return on the S&P 500 to 9.1%, with the Dow Jones Industrial Average returning 0.5%. Because of declining interest rates, the Lehman Brothers Government/Corporate Bond Index experienced a return of 12.8% for the year ending September 30, 1998, and the Salomon Brothers Broad Grade Index experienced a return of 11.5%.

The returns were calculated using a time weighted rate of return in accordance with Standards of the Association for Investment Management and Research (AIMR), unless a modification is described in the discussion of the return.

The MPSERS is well diversified among asset classes. As of September 30, 1998, the portfolio consisted of 48.8% domestic equities, 24.3% fixed income (includes 0.3% in mortgages), 8.8% alternative investments, 8.0% real estate, 6.0% short-term investments, and 4.1% international equities.

Domestic Stocks - Active

The objective of the actively-managed domestic stock division is long-term capital appreciation by investing primarily in publicly-traded stocks of U.S.-based companies.

Fiscal year 1998 witnessed considerable volatility in the equity markets as competing factors pulled in different directions. On the positive side, low inflation, declining interest rates, low unemployment, and moderate growth in the U.S. economy helped the markets achieve new highs. On the negative side, concerns about corporate earnings growth, deflation fears, questions about presidential integrity, and worries about the health of a number of international economies and financial

Report on Investment Activity

markets caused some temporary market declines.

Domestic stock returns closed the fiscal year with a 5.1% increase, compared with a 9.1% increase for the S&P 500 Index, and a 0.5% increase for the Dow Jones Industrial Average. This compared with a median return of 3.7% for state plans, including MPSERS, as compiled by Capital Resource Advisors. The markets were led by a 44.0% gain for communication stocks, followed by 38.3% for health care, and 31.0% for utilities. Three-year and five-year results for the actively-managed domestic stock portfolio were 20.6% and 17.4%, respectively, on an annualized basis. This compared with 22.6% and 19.9% for the S&P 500, and 12.9% and 11.9% for the median of state plans.

At the end of the fiscal year, actively-managed domestic stocks represented 36.9% of total assets, compared with 36.7% at the end of 1997, and 35.4% at the close of 1996.

Domestic Stocks - Passive

The objective of the enhanced S&P 500 and S&P MidCap Index Funds is to closely match the return performance of their benchmarks. The S&P 500 Index return for the fiscal year was 10.1% versus the benchmark's 9.1%. The S&P MidCap Index Fund return for the fiscal year was a negative 4.3% versus its benchmark of a negative 6.3%. The enhancements to the returns were the result of strategic allocations of additional funds to passive equity investments during market corrections and the opportunistic use of derivative programs. At the end of the fiscal year, passive domestic stock portfolios represented 11.9% of total assets, with the S&P 500 Index Fund accounting for 11.0% and the S&P MidCap Index Fund accounting for 0.9%. Indexed stock portfolios represented 10.5% of total assets at the end of the prior fiscal year.

International Equities

Passive exposure to international equity returns is achieved by investing in a combination of fixed income notes and equity swap agreements on foreign stock indices in developed markets. Interest on the dedicated notes is exchanged for international stock index returns, and the notional amount of the swap agreements is held in the approximate proportions of the Salomon Smith Barney Broad Market Index (BMI) Europe and Pacific Composite (EPAC) country weightings for the larger component countries. The passive investment program using swap agreements was established in 1993. During fiscal 1998, \$216 million of exposure was withdrawn from the combination structure, bringing international equity investments to 4.1% of total assets.

The benchmark used to evaluate international equity returns is a custom version of the Salomon Smith Barney BMI-EPAC adjusted for net dividends. Fifty percent of the benchmark is hedged to the U.S. dollar and the other 50% is impacted by local currency exchange rate changes. The composite international equity return of a negative 4.7% in fiscal year 1998 compared favorably with the Salomon Smith Barney BMI-EPAC return of a negative 8.1%. The composite international equity return of 8.4% for 3 years compared well with the benchmark's return of 6.6% over the same period.

The international equity exposure through the combination of fixed income LIBOR notes and equity swap agreements was valued at \$1,295 million on September 30, 1998. That valuation included a net unrealized loss on equity index exposures of \$36.8 million and an unrealized loss of \$15.0 million on LIBOR note investments held. Unrealized equity losses reflect both the decline of several targeted international equity indices later in the year and the increase in index exposure cost levels throughout the year. As older swap agreements matured, equity gains were realized and new replacement swap exposures were established at higher index levels. At the end of September, total realized gains and net interest received in excess of counterparty obligations reached a record \$376.3 million since the program began. During fiscal 1998, \$237.3 million of gains on equity exposures were realized, and \$42.8 million of interest in excess of obligations on completed swaps was also recognized.

Fixed Income (Excluding Mortgages)

For the fiscal year ending September 30, 1998, the fixed income portfolio returned 10.0% compared to the median of 10.9% for the state plans, including MPSERS, as compiled by Capital Resource Advisors evaluations. For the three-year period, the portfolio returned 8.7%, and for the five-year period the portfolio returned 7.7%. This compares with the median

Report on Investment Activity

portfolio return of 8.7% for the three-year period and 7.6% for the five-year period.

As the year progressed, rates declined and quality spreads widened as investors purchased the long-term treasury issues in a flight to quality. The fixed income market, therefore, rewarded higher grade, longer-term issues. The MPSERS' fixed income portfolio had a shorter duration than the Lehman Government and Corporate Index. As a result, the fund underperformed the Lehman Index for the one-year period, 10.0% versus 12.8%, but was still in line for the three-year period, 8.7% versus 8.9%, and out-performed the index for the five-year period, 7.7% versus 7.2%. Relative to the Salomon Brothers Broad Grade Index, MPSERS' fixed income portfolio under-performed in the one-year time horizon, 10.0% to 11.5%, matched in the three year period, 8.7% to 8.7%, and was ahead in the five-year period 7.7% to 7.2%.

Fixed Income represented 24.0% of the total portfolio compared with 24.9% last year. The corporate sector represented 48% of fixed income securities with government securities representing 52%. Last year, corporates represented 41% of the total with governments representing 59%. The high level of corporates was due to a concerted strategy to acquire investment grade issues where spreads had widened significantly. The lower holding of governments can be attributed to a substantial increase in the number of issues called, particularly government sponsored enterprises.

Real Estate Equity

As of the year ending September 30, 1998, 8.0% of the total portfolio was invested in equity real estate. This compares to 6.4% and 6.3% for the fiscal years ending September 30, 1997 and 1996, respectively. The asset allocation for equity real estate investment was increased to 8.5% of the total plan net assets from 7.5% for fiscal year ending September 30, 1997.

The one-year, three-year and five-year total equity real estate net returns for the fiscal year ending September 30, 1998, were 10.2%, 11.4% and 8.0%, respectively, as quoted by Capital Resource Advisors. This compares to the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index returns of 17.3%, 12.5% and 9.9% relating to the same time periods. The NCREIF portfolio of properties is heavily weighted in the office sector, 41.3% versus the MPSERS portfolio at 28.9%. However, the historical volatility of the office sector returns makes it a more risky asset class. This variation in portfolio weighting gives the NCREIF portfolio a much higher level of risk than MPSERS has chosen to assume. In addition, the NCREIF Index does not account for fees/overhead, while MPSERS' returns quoted above are after fees/overhead.

The real estate investments are broadly diversified geographically, across the country, by type of property, and by class of property, to reduce risk. Major property types include the following: Central Business District (CBD) office, suburban office, regional malls, neighborhood and community shopping centers, industrial/warehouse buildings and apartments. The MPSERS, through its advisors and private real estate operating companies it controls, acquires, develops, redevelops and disposes of real estate with the goal of maximizing returns while maintaining an *acceptable* level of risk. The properties are held in various investment vehicles: Partnerships, LLC's, Trusts, Commingled funds, and REIT stock. These legal entities allow MPSERS to enjoy the benefits of real estate ownership while limiting the liability associated with this asset class. In all new investments, MPSERS retains approval rights over critical decisions. The properties are regularly valued by independent appraisers to establish market values. The market values established by the appraisers are utilized in computing the real estate portfolio appreciation return. The appreciation return coupled with the income return produced from the real estate holdings are utilized to derive the equity real estate portfolio total return.

Real Estate Debt (Mortgages)

As of the year ending September 30, 1998, 0.3% of the total portfolio was invested in mortgages. This compares to 0.6% and 2.5% for the fiscal years ending September 30, 1997 and 1996, respectively. The asset allocation objective is to reduce mortgage holdings to 0% over time. In the current interest rate environment, MPSERS cannot meet actuarial return requirements in new mortgage loans.

The one-year, three-year and five-year total returns for the mortgage portfolio, for the fiscal year ending September 30, 1998, were 16.1%, 10.1% and 8.5%, respectively. This compares to Salomon Brothers Broad Grade Index returns of

Report on Investment Activity

11.5%, 8.7% and 7.2% relating to the same time periods. Since the majority of the mortgage portfolio is federally insured mortgages, and therefore less risky, the returns generated by the mortgage portfolio would normally be less than the index.

During the previous year, the majority of the mortgage portfolio was sold to take advantage of the favorable low interest rate environment. The low interest rates, existing in the overall economy, resulted in premium prices being paid for the mortgages sold. The sale of the mortgages resulted in realized gains to the portfolio. On average, MPSERS received sale prices between 101% and 105% of the unpaid principal balance of the notes compared to purchase prices of between 55% and 60% of face value for these same loans when purchased back in the late 1970's and early 1980's. The remaining mortgage holdings are mainly comprised of federally insured multifamily mortgages and a few multi-tenant commercial office buildings. In addition, the mortgage portfolio contains five mortgages on U.S. Post Offices; these mortgages became part of the portfolio when the Employees' Retirement System, School District of the City of Detroit, was merged into MPSERS, by law, in the mid 1970's. The mortgage portfolio is concentrated in Michigan and the Midwest.

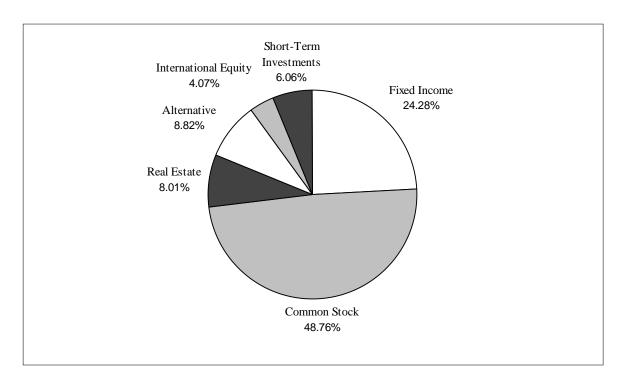
Alternative Investments

Alternative Investments are investments in the private equity market, either directly in companies or indirectly through limited partnerships. Through September 30, 1998, approximately 90% of Alternative investments were made through limited partnerships. Of the investments in limited partnerships, approximately 8% were in partnerships investing internationally. The remaining 10% were direct private equity investments and public stock distributions received from the limited partnerships. The percentage of assets in alternative investments has consistently increased from 4.8% as of September 30, 1993, to 8.8% as of September 30, 1998. The asset allocation for alternative investments is 8.8% while the long-term target asset allocation is 7.5%.

The one-year, three-year and five-year total alternative investment returns for the fiscal year ending September 30, 1998, were 26.4%, 25.7% and 21.9%, respectively.

Report on Investment Activity

Asset Allocation



Investment Results Periods Ending September 30, 1998

	Current		Annualized Rate of Retur	· ·
Investment Category	Year	3 Years	5 Years	10 Years
Total Portfolio	8.3 %	15.5%	13.0%	11.4%
Median	6.6	12.9	11.9	11.4
Domestic Equities Stock - Active	5.1	20.6	17.4	13.6
Domestic Equities Stock - Passive*	8.4	22.4	19.2	17.7
Standard & Poor's (S&P 500)	9.1	22.6	19.9	17.3
International Equities	(4.7)	8.4	6.6	N/A
Net Salomon BMI - EPAC 50/50	(8.1)	6.6	6.0	N/A
Fixed Income Bonds (U.S. Corp and Govt)	10.0	8.7	7.7	9.6
Salomon Brothers Broad Grade Index	11.5	8.7	7.2	9.3
Real Estate - Debt	16.1	10.1	8.5	10.3
Salomon Brothers Broad Grade Index	11.5	8.7	7.2	9.3
Real Estate - Equity	10.2	11.4	8.0	4.7
NCREIF	17.3	12.5	9.9	5.3
Alternative Investments	26.4	25.7	21.9	16.0

^{*} Passive portfolio consists of a S&P 500 fund and a S&P MidCap fund. The return is a weighted average of the two funds.

Report on Investment Activity

Largest Assets Held

Largest Stock Holdings (By Market Value) **September 30, 1998**

Rank	Shares	Stocks	Market Value
1	5,319,449	Microsoft Corporation	\$ 585,471,856
2	6,671,018	General Electric Corporation	530,762,870
3	5,831,328	Warner-Lambert Company	440,265,264
4	3,921,834	Pfizer Incorporated	414,733,946
5	5,719,952	Amoco Corporation	308,162,414
6	5,070,046	McDonald's Corporation	302,618,371
7	6,109,536	Chrysler Corporation	292,494,036
8	3,927,147	Federal National Mortgage Association	252,319,195
9	7,709,518	Compaq Computer Corporation	243,813,507
10	4,376,349	Wal-Mart Stores Incorporated	239,058,064

Largest Bond Holdings (By Market Value) **September 30, 1998**

Rank	Par Amount	Bonds & Notes	Market Value
1	\$ 256,047,000	U.S. Treasury Bonds at 9.125% Due 5-15-2009	\$ 313,058,425
2	240,428,110	U.S. Treasury 0% Callable Principal Due 5-15-2011	170,247,145
3	206,552,500	U.S. Treasury 0% Coupon Strips Due 8-15-2003	167,282,739
4	150,220,000	Morgan, J.P. FRN Due 3-13-2000	149,468,900
5	170,499,700	U.S. Treasury 0% Callable Principal Due 11-15-2011	117,794,833
6	112,665,000	FHLMC Debenture 6.70% Due 7-23-2008	114,095,846
7	119,821,000	U.S. Treasury Tiger 14 0% Due 8-15-2004	92,389,180
8	85,437,625	FHLMC Debenture 6.51% Due 8-18-2008	86,332,157
9	75,774,723	First Chicago FRN Due 7-28-2003	76,814,352
10	75,110,000	FHLMC - Global 6.55% Due 11-13-2001	75,250,456

A complete list of stock and bond holdings is available from the Michigan Department of Treasury.

Report on Investment Activity

Schedule of Investment Fees

The State Treasurer is the investment fiduciary and custodian of the System's funds pursuant to state law. Outside advisors are utilized to augment the State Treasurer's internal staff in the real estate and alternative investment markets. Only 8.5% of the total investment portfolio is managed by fully discretionary outside advisors. Outside advisor's fees are netted against the partnership or trust fund income. The Michigan Department of Treasury's cost of operations applicable to the System for the fiscal year amounted to \$4,728.3 thousand or less than two basis points (.02%) of the average market value of the portfolio.

Schedule of Investment Fees

	Investment	Managers'	Fees:
--	------------	-----------	-------

	Assets under Management (in thousands)	Fees (in thousands)	Basis Points*
State Treasurer Outside Advisors - Alternative Real Estate	\$29,084,295.8 2,563,520.6 140,938.2	\$ 4,728.3 17,064.2	1.6 66.6
Total	\$31,787,754.6	-	-

Other Investment Services Fees:

	Assets in Custody**	
Custody Fees	\$22,628,074.4	\$105.9
Security Lending Fees	1,305,048.4	55,312.3

^{*} Outside Advisors Fees are netted against the income of the partnership and trust income. The partnership agreements define the management fees, which range from 150 to 250 basis points of the committed capital, in most cases the fees are netted against income. For Real Estate the asset management fee ranges from 25 to 90 basis points and is netted against current year's income.

^{**} Other investment service fees are charged on assets managed by the State Treasurer held at its custodial bank in the amount of \$22,628.1 million; \$1,305.0 million of the assets were on loan at fiscal year end.

Report on Investment Activity

Schedule of Commissions

Fiscal Year Ended 9-30-98

	Number of Shares Traded	Commissions Paid (1)	Average Commission Rate per Share
Investment Performance Measurement Consultant:			
Capital Resource Advisors			
(Directed brokerage included below)	1,304,986	\$ 78,299	0.06
Investment Brokerage Firms:			
Merrill Lynch & Company	8,782,098	\$ 504,073	0.06
Salomon Smith Barney, Inc.	6,646,259	398,776	0.06
Paine Webber, Inc.	6,046,809	362,808	0.06
Bear Stearns & Company	5,317,627	303,027	0.06
Donaldson, Lufkin & Jenrette Securities Corp.	4,206,385	252,383	0.06
Bridge Trading Company	3,764,889	225,893	0.06
Schroder & Company	3,723,428	219,124	0.06
Sanford C. Bernstein & Company	3,052,395	183,144	0.06
C.S. First Boston Corporation	2,707,836	162,470	0.06
Prudential Securities Inc.	2,377,690	142,662	0.06
Goldman, Sachs & Company	2,386,411	139,244	0.06
Lehman Brothers, Inc.	2,343,282	136,841	0.06
Morgan Stanley & Company	2,105,634	125,876	0.06
Oppenheimer & Company	2,071,384	120,528	0.06
J.P. Morgan Securities, Inc.	1,957,291	117,437	0.06
Capital Inst. Services	1,646,486	98,789	0.06
S.G. Cowen & Company	1,479,066	88,744	0.06
Charles Schwab & Company, Inc.	1,432,573	85,954	0.06
The Citation Group	1,222,340	71,838	0.06
Wilshire Associates	1,170,364	70,222	0.06
Everen Securities	1,126,875	67,613	0.06
Standard & Poor's Securities	1,120,115	67,207	0.06
Montgomery Securities	789,782	47,387	0.06
Deutsche/Morgan/Grenfell	717,601	43,056	0.06
SoundView Financial Group	495,501	29,730	0.06
Subtotal (25 highest)	68,690,121	\$ 4,064,826	0.06(2)
All Other Brokerage Firms	905,076	54,305	$0.06^{(3)}$
Total	69,595,197	\$ 4,119,131	0.06(4)

These amounts are included in purchase and sale prices of investments.

The average commission rate per share for the top 25 brokerage firms.

The average commission rate per share for all other brokerage firms, excluding the top 25 brokerage firms.

⁽⁴⁾ The average commission rate per share for all brokerage firms.

Investment Summary Activity

	19	98	199	97
		Percent of Total		Percent of Total
	Market Value*	Market Value	Market Value*	Market Value
Fixed Income:				
Government Bonds	\$ 3,968,363,484	12.49 %	\$ 4,400,878,850	14.68 %
Corporate Bonds &				
Preferred Stocks	3,639,635,998	11.45	3,048,187,564	10.17
Convertible Bonds	0	0	14,544,496	0.05
Mortgages	108,701,854	0.34	178,817,127	0.60
Total Fixed Income	\$ 7,716,701,336	24.28 %	\$ 7,642,428,037	25.50 %
Common Stock	15,499,470,309	48.76	14,230,995,186	47.49
Real Estate	2,544,813,370	8.01	1,903,074,982	6.35
Alternative	2,804,466,016	8.82	1,974,663,914	6.59
International Equity	1,294,859,857	4.07	1,612,531,491	5.38
Short-Term Investments**	1,927,443,670	6.06	2,605,358,394	8.69
Total	\$31,787,754,558	100.00 %	\$ 29,969,052,004	100.00 %

^{*} Short-term investments are at cost, which approximates market.

^{**} Includes equity in the State Treasurer's Common Cash Fund but excludes amounts payable and receivable for sales and purchases of securities with a settlement date after September 30 for each fiscal year. Amount also excludes \$1,311,829,516 and \$1,112,477,273 in cash collateral for security lending for fiscal year 1998 and 1997 respectively.

ACTUARIAL SECTION

Actuary's Certification
Summary of Actuarial Assumptions and Methods
Schedule of Active Member Valuation Data
Schedule of Changes in Retirement Rolls
Prioritized Solvency Test
Summary of Plan Provisions

Actuarial Section

Actuary's Certification

THE SEGAL COMPANY

One Park Avenue New York New York 10016-5895 212-251-5321 FAX: 212-251-5490

January 22, 1999

Michael J. Karlin, F.S.A., M.A.A.A. Senior Vice President & Actuary

> Ms. Janet E. Phipps Director Department of Management and Budget and Retirement Board Michigan Public School Employees Retirement System P.O. Box 30176 Lansing, Michigan 48909

Ladies and Gentlemen:

The Michigan Public School Employees Retirement System (MPSERS) is funded on an actuarial reserve basis. The basic financial objective of MPSERS is to establish and receive contributions that remain approximately level as a percentage of active member payroll over a long period of years.

Actuarial valuations are prepared annually to determine MPSERS's actuarial liabilities and the employer contributions required to fund the System in accordance with the actuarial reserve funding provisions of the governing State Statute. The most recent actuarial valuation as of September 30, 1998 included a total of 429,519 members of MPSERS. The actuarial value of MPSERS's assets amounted to approximately \$31.87 billion on September 30, 1998.

The actuarial assumptions used in the 1998 valuation are the same as those used in the previous annual actuarial valuation. These assumptions produce valuation results which we consider to be reasonably indicative of the plan's underlying cost. Also, in our opinion, the actuarial assumptions and methods used for funding purposes meet the parameters for the disclosures presented in the financial section by GASB Statement No. 25.

Our actuarial valuation of MPSERS as of September 30, 1998 was performed by qualified actuaries in accordance with accepted actuarial procedures. In our opinion, the calculated contribution rate meets the fundamental objectives of State law. Based on the 1998 valuation results, it is also our opinion that the Michigan Public School Employees Retirement System continues in sound condition, in accordance with actuarial principles of level cost financing.

Most of the information used in the supporting schedules in the Actuarial and Statistical Sections, as well as the Schedules of Funding Progress and the employer contributions shown in the Schedules of Employer Contributions in the Financial Section of this report were provided by our firm.

Sincerely.

Michael Karlin, F.S.A., M.A.A.A Senior Vice President & Actuary

Michael Karli

Atlanta Boston Chicago Cleveland Denver Edmonton Hartford Houston Los Angeles Minneapolis New Orleans New York Phoenix San Francisco Seattle Toronto Washington, D.C. West Palm Beach



Summary of Actuarial Assumptions and Methods

- 1. The investment return rate used in making the valuations was 8% per year, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the rate of investment return in excess of the inflation rate. Considering other financial assumptions, the 8% long range investment return rate translates to an assumed real rate of return of 4%. Adopted 1997.
- 2. The mortality table used in evaluating allowances to be paid was the 1983 Individual Annuitants Mortality Table, set forward two years for men and one year for women. Adopted 1994.
- 3. Sample probabilities of retirement with an age and service allowance are shown in Schedule 1 on the next page. Adopted 1994.
- 4. Sample probabilities of withdrawal from service and disability, together with individual pay increase assumptions, are shown in Schedule 2 on the next page of this report. Adopted 1994.
- 5. Total active member payroll is assumed to increase 4% per year. This represents the portion of the individual pay increase assumptions attributable to inflation. In effect, this assumes no change in the number of active members. Adopted 1997.
- 6. An individual entry age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1975. Unfunded actuarial accrued liabilities, including actuarial gains and losses, are funded over 50 years and over 40 years on a declining basis beginning October 1, 1996. Adopted 1996.
- 7. Valuation assets (cash and investment) were reset to market value as of September 30, 1997. After this date, they will again be valued using a five year smoothed market value method. The excess (shortfall) of actual investment income (including interest, dividends, realized and unrealized gains or losses) that occurs after September 30, 1997 over the imputed income at the valuation interest rate is considered the gain (loss), which is spread over five years. Adopted 1997.
- 8. The data about persons now covered and about present assets was furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary.
- 9. The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA). The assumptions used in the actuarial valuations were adopted by the System's board and the Department of Management and Budget after consulting with the actuary.

ACTUARIAL SECTION

Summary of Actuarial Assumptions and Methods (Continued)

SCHEDULE 1 Percent of Eligible Active Members Retiring Within Next Year

Retirement Ages	Basic	MIP
50		48 %
52		28
55	28 %	17
58	20	18
61	26	24
64	35	30
67	33	25
70	54	30

SCHEDULE 2 Separation From Active Employment Before Age & Service Retirement & Individual Pay Increase Assumptions

Sample Ages	Years Service	Percent of Active Members Withdrawing Within Next Year (Men and Women)	Percent of Active Members Becoming Disabled Within Next Year	Percent Increase In Pay During Next Year
All	0	37.00 %		
	1	19.50		
	2	11.00		
	3	8.00		
	4	6.50		
25	5 & Over	5.78	0.01 %	15.06 %
35		2.02	0.01	8.13
45		1.39	0.05	5.78
55		1.35	0.32	4.49
65		1.35	0.33	4.00

Actuarial Valuation Data

Schedule of Active Member Valuation Data

Valuation Date Sept. 30	Number	Reported Annual Payroll*	Average Annual Pay	% Increase	Average Age	Average Service
1989	287,750	\$ 5,284,205	\$ 18,364	5.2 %	41.0 years	9.4 years
1990	288,865	5,633,895	19,504	6.2	41.3	9.5
1991	293,503	6,032,513	20,553	5.4	41.5	9.6
1992	297,230	6,427,775	21,626	5.2	43.2	10.2
1993	296,585	6,897,924	23,258	7.5	42.2	9.8
1994	291,006	7,164,806	24,621	5.9	42.5	10.0
1995	294,911	7,564,876	25,651	4.2	43.4	10.1
1996	295,096	7,807,029	26,456	3.1	43.6	9.9
1997	295,691	8,027,450	27,148	2.6	43.6	10.0
1998	302,016	8,265,463	27,368	0.8	43.5	9.7

July 1 through June 30 payrolls in thousands of dollars through 1993, October 1 through September 30 annualized payments for fiscal years beginning October 1, 1993.

Schedule of Changes in the Retirement Rolls

Year Added to Rolls		ed to Rolls	Removed from Rolls		Rolls-	End of Year	% Increase	Average	
Ended Sept. 30	No.	Annual Allowances*	No.	Annual Allowances*	No.	Annual Allowances*	in Annual Allowances	Annual Allowances	
1989	6,086	\$ 79,382	2,280	\$ 14,973	79,917	\$ 611,424	11.8 %	\$ 7,651	
1990	5,808	93,148	2,439	17,722	83,286	686,850	12.3	8,247	
1991	5,595	83,226	2,628	20,359	86,253	749,717	9.2	8,692	
1992	6,651	104,184	2,703	22,611	90,201	831,290	10.9	9,216	
1993	6,278	100,691	2,905	20,295	93,574	911,686	9.7	9,743	
1994	7,451	129,506	3,036	22,373	97,989	1,018,819	11.8	10,397	
1995	8,192	146,151	3,030	22,998	103,151	1,141,972	12.1	11,071	
1996	7,443	135,326	3,129	25,487	107,465	1,251,811	9.6	11,649	
1997	7,691	147,433	3,314	27,765	111,842	1,371,479	9.6	12,263	
1998	8,384	165,312	3,606	31,429	116,620	1,505,362	9.8	12,908	

In thousands of dollars

ACTUARIAL SECTION

Prioritized Solvency Test

MPSERS' funding objective is to meet long term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due, the ultimate test of financial soundness. Testing for level contribution rates is the long term solvency test.

A prioritized solvency test is another means of checking a system's progress under its funding program. In a short condition test, the plan's present assets (cash and investments) are compared with: (1) active member contributions on deposit; (2) the liabilities for future benefits to present retired lives; and (3) the liabilities for service already rendered by active members. In a system that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability 3) is normally partially covered by the remainder of present assets. Generally, if the System has been using level-cost financing, the funded portion of liability 3 will increase over time. Liability 3 being fully funded is not necessarily a byproduct of level percent of payroll funding methods.

The schedule below illustrates the history of the liabilities of the System and is indicative of MPSERS' policy of following the discipline of level percent of payroll financing.

		arial Present V ed Liabilities						
Valuation Date	(1) Active Member	(2) Retirants and	(3) Active Members (Employer Financed	Valuation	Portion of Present Value Covered by Assets			
Sept. 30	Contribution	s Beneficiaries	Portion)	Assets	(1)	(2)	(3)	(4)***
1989 ^{#@}	\$ 1,003	\$ 6,046	\$ 7,333	\$ 12,971	100 %	100 %	80.8 %	90.2 %
1990	1,192	6,611	7,963	13,746	100	100	74.6	87.2
1991	1,365	7,505	9,162	14,653	100	100	63.1	81.3
1992	1,510	8,212	9,841	15,333	100	100	57.0	78.4
1993+	1,700	9,177	10,822	16,999	100	100	56.6	78.3
1994	1,892	10,051	11,557	18,502	100	100	56.7	78.7
1994 [@]	1,892	10,312	12,810	18,502	100	100	49.2	73.9
1995	2,057	11,569	13,776	20,455	100	100	49.6	74.6
1996	2,261	12,590	13,720	22,529	100	100	56.0	78.9
1997	2,500	14,303	13,376	25,485	100	100	64.9	84.4
1997 ^{@+}	2,500	14,303	12,989	30,051	100	100	102.0	100.9
1998	2,505	15,689	13,943	31,870	100	100	98.1	99.2

[®] Revised actuarial assumptions.

Benefits amended.

⁺ Revised asset valuation method.

Percents funded on a total valuation asset and total actuarial accrued liability basis.

Summary Of Plan Provisions

Our actuarial valuation of MPSERS as of September 30, 1998 is based on the present provisions of the Public School Employees' Retirement Act (Act 300 of 1980, as amended).

Regular Retirement (no reduction factor for age)

<u>Eligibility</u> — Age 55 with 30 years credited service; or age 60 with 10 years credited service. For Member Investment Plan (MIP) members, any age with 30 years credited service; or age 60 with 10 years credited service; or age 60 with 5 years of credited service provided member worked through 60th birthday and has credited service in each of the last 5 years.

Mandatory Retirement Age — None.

<u>Annual Amount</u> — Total credited service times 1.5% of final average compensation.

<u>Final Annual Compensation</u> — Average of highest 5 consecutive years. (3 years for MIP members).

Early Retirement (age reduction factor used)

Eligibility — Age 55 with 15 or more years credited service and earned credited service in each of the last 5 years.

<u>Annual Amount</u> — Regular retirement benefit, reduced by 1/2% for each month by which the commencement age is less than 60.

Deferred Retirement (vested benefit)

Eligibility — 10 years of credited service. Benefit commences at the time age qualification is met.

Annual Amount — Regular retirement benefit based on service and final average compensation at time of termination.

Duty Disability Retirement

<u>Eligibility</u> — No age or service requirement; in receipt of workers' disability compensation.

<u>Annual Amount</u> — Computed as regular retirement benefit with minimum benefit based on 10 years credited service. Additional limitation such that disability benefits plus authorized outside earnings limited to 100% of final average compensation (increased by 2% each year retired).

Non-Duty Disability Retirement

Eligibility — 10 years of credited service.

<u>Annual Amount</u> — Computed as regular retirement benefit based on credited service and final average compensation at time of disability. Additional limitation such that disability benefits plus authorized outside earnings limited to 100% of final average compensation (increased by 2% each year retired).

Duty Death Before Retirement

<u>Eligibility</u> — No age or service requirement. Beneficiary is in receipt of workers' compensation. Also applies to "duty disability" retirees during first three years of disability.

ACTUARIAL SECTION

Summary Of Plan Provisions (Continued)

<u>Annual Amount</u> — Spouse benefit computed as regular retirement benefit with minimum benefit based on ten years of credited service, reduced for 100% joint and survivor election. If no surviving spouse, children under 18 share in benefit; if no spouse or children, a disabled and dependent parent is eligible.

Non-Duty Death Before Retirement

<u>Eligibility</u> — 15 years of credited service, or age 60 and 10 years of credited service. 10 years of credited service, or age 60 and 5 years of credited service for MIP members.

<u>Annual Amount</u> — Computed as regular retirement benefit, reduced in accordance with a 100% joint and survivor election, with payments commencing first of month following death. For the beneficiary of a deferred member, benefit commences at the time a member would have attained the minimum age qualification.

Post-Retirement Cost-of-Living Adjustments

One-time upward adjustments have been made in 1972, 1974, 1976 and 1977 for members retired on or after July 1, 1956 and prior to July 1, 1976 who were eligible for Social Security benefits. For members who retired prior to July 1, 1956 and not eligible for Social Security benefits based upon membership service, the minimum base pension was increased in 1965, 1971, 1972, 1974 and 1981, and in 1976 and 1977 one-time upward adjustments were made.

Beginning in 1983, eligible recipients received an annual distribution of investment earnings in excess of 8% (supplemental payment). On January 1, 1986, all members who retired prior to January 1, 1986 were given a permanent 8% increase. On January 1, 1990 a one-time upward adjujstment for members who retired prior to October 1, 1981 was made.

Currently members receive annual increases based on the following schedule:

Retired before January 1, 1987 -- Greater of Supplemental payment or automatic 3% increase Retired on or after January 1, 1987 under MIP - Automatic 3% increase only Retired on or after January 1, 1987 not under MIP - Supplemental payment only

Post-Retirement Health Benefits

Members in receipt of pension benefits are eligible for fully State-paid Master Health Care Plan coverage (90% State-paid Dental Plan, Vision Plan and Hearing Plan coverage) with the following exceptions:

- 1. Members not yet eligible for Medicare coverage pay an amount equal to the Medicare Part B preimums.
- Members with less than 30 years of service, who terminate employment after October 31, 1980 with vested deferred benefits, are eligible for partially State-paid health benefit coverage (no State payment if less than 21 years service).

Dependents are eligible for 90% State-paid health benefit coverage (partial State payment for dependents of deferred vested members who had 21 or more years of service).

Summary Of Plan Provisions (Continued)

Member Contributions

MIP Participants hired before January 1, 1990 — 3.9% of pay

MIP Participants hired on or after January 1, 1990 — 3.0% of first \$5,000 of pay, plus 3.6% of next \$10,000 of pay, plus 4.3% pay in excess of \$15,000.

Non-MIP Participants — None.

Senate Bill No. 719 (Enacted in 1997)

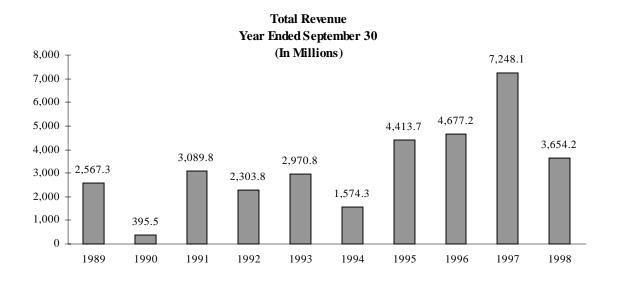
Under this legislation, the actuarial value of assets was reset to market value as of September 30, 1997, with the 5-year smoothing of investment gains or losses to be applied prospectively. Also, the inflation component of the salary scale was revised from 5% to 4%. Finally, a stabilization subaccount was established to which any overfunding is to be credited.

Schedule of Revenues by Source
Schedule of Expenses by Type
Schedule of Benefit Expenses by Type
Schedule of Retired Members by Type of Benefit
Schedule of Health Benefits
Schedule of Average Benefit Payments
Ten Year History of Membership
Schedule of Participating Employers

Schedule of Revenues by Source

	Member &					
Fiscal Year	Employer		Employer	Contributions	Net Investment	
Ended	Health	Member		% of Annual	&	
<u>Sept. 30</u>	Contributions	Contributions	<u>Dollars</u> *	Covered Payroll	Other Income	<u>Total</u>
1989	\$141,662,800	\$157,309,641	\$424,642,678	8.04%	\$1,843,715,391	\$2,567,330,510
1990	182,127,000	174,658,758	472,089,593	8.38	(433,399,646)	395,475,705
1991	171,007,634*	174,835,458	502,685,310	8.33	2,241,235,939	3,089,764,341
1992	231,559,072*	196,103,714	533,025,550	8.29	1,343,143,928	2,303,832,264
1993	166,642,908*	223,584,885	612,220,399	8.88	1,968,375,434	2,970,823,626
1994	88,178,299*	244,086,635	809,768,082	11.30	432,291,116	1,574,324,132
1995	271,031,481*	248,662,424	770,541,054	10.19	3,123,477,389	4,413,712,348
1996	305,173,023*	255,085,948	829,600,401	10.63	3,287,367,155	4,677,226,527
1997	342,675,636*	253,358,290	904,817,513	11.27	5,747,292,566	7,248,144,005
1998	359,266,764*	252,672,436	622,437,022	7.53		2,419,775,950
3,654,152,17						

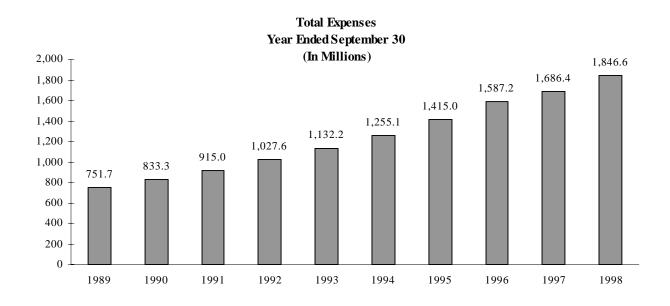
^{*} Includes employer contributions for health, dental and vision benefits funded on a pay-as-you-go basis, or as statutorily required.



Schedule of Expenses by Type

Fiscal Year Ended <u>Sept. 30</u>	Benefit <u>Payments*</u>	Refunds and Transfers	Administrative <u>Expenses</u>	<u>Total</u>
1989	\$ 741,995,367	\$ 1,425,086	\$ 8,251,139	\$ 751,671,592
1990	821,705,321	2,418,521	9,162,436	833,286,278
1991	898,321,741	4,630,054	12,095,624	915,047,419
1992	1,010,916,803	3,453,420	13,229,581	1,027,599,804
1993	1,115,092,306	3,940,883	13,121,256	1,132,154,445
1994	1,234,384,948	5,457,370	15,307,293	1,255,149,611
1995	1,391,780,504	7,926,131	15,343,147	1,415,049,782
1996	1,565,111,270	11,698,045	10,381,801	1,587,191,116
1997	1,656,442,197	17,904,602	12,102,095	1,686,448,894
1997	1,810,891,942	21,252,147	14,463,339	1,846,607,428

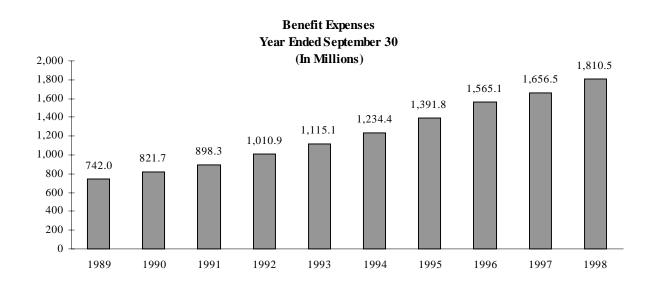
^{*}Includes health benefits



Schedule of Benefit Expenses by Type

Fiscal Year Ended <u>Sept. 30</u>	Regular <u>Benefits</u> *	Disability Benefits	Supplemental <u>Check</u>	Health Benefits**	<u>Total</u>
1989	\$574,871,159	\$ 16,415,752	\$ 28,088,593	\$122,619,863	\$ 741,995,367
1990	645,955,531	19,981,087		155,768,703	821,705,321
1991	706,806,593	19,979,268		171,535,880	898,321,741
1992	775,316,096	21,836,151		213,764,556	1,010,916,803
1993	855,363,962	23,909,603		235,818,741	1,115,092,306
1994	952,147,141	25,839,763		256,398,044	1,234,384,948
1995	1,071,950,982	28,257,525		291,571,997	1,391,780,504
1996	1,178,250,042	31,209,798	58,800,478	296,850,952	1,565,111,270
1997	1,274,469,892	37,129,588	6,228,620	338,659,636	1,656,487,736
1998	1,412,550,359	35,908,817	5,992,263	356,065,946	1,810,517,485

^{*}Includes prior post retirement adjustments.



^{**}Includes dental and vision benefits

Schedule of Retired Members by Type of Benefit

September 30, 1998

Amount			Тур	e of Re	tirement	*		\$	Selected O	ption**	
Monthly Benefit	Number of Retirees	1	2	3	4_	_5	6	Opt. 1	Opt. 2	Opt. 3	Opt.1E 2E,3E
\$ 1 - 200	14,627	12,528	1,127	102	642	1	227	9,150	2,716	1,887	874
201 - 400	18,519	15,211	1,417	88	1,288		515	11,187	3,745	2,551	1,036
401 - 600	13,285	10,874	977	54	871		509	7,485	2,692	2,093	1,015
601 - 800	10,268	8,547	685	14	591		431	5,753	2,016	1,539	960
801 - 1,000	8,362	7,114	475	18	430	1	324	4,421	1,701	1,204	1,036
1,001 - 1,200	7,132	6,184	370	3	301		274	3,448	1,557	1,123	1,004
1,201 - 1,400	6,453	5,750	270	2	239		192	2,897	1,542	1,103	911
1,401 - 1,600	6,294	5,699	240	3	157		195	2,717	1,708	1,118	751
1,601 - 1,800	6,045	5,675	159		84		127	2,618	1,568	1,181	678
1,801 - 2,000	6,056	5,765	145	2	50		94	2,495	1,531	1,252	778
Over 2,000	19,579	19,176	232		30	_1_	140	7,892	3,525	3,699	4,463
Totals	116,620	102,523	6,097	286	4,683	3	3,028	60,063	24,301	18,750	13,506

^{*} Type of Retirement

- 1 Normal retirement for age & service
- 2 Survivor payment normal retirement
- 3 Duty disability retirement
- 4 Non-duty disability retirement
- 5 Survivor payment duty death in service
- 6 Survivor payment non-duty death in service

**Selected Option

Opt. 1. - Straight life allowance

Opt. 2 - 100% survivor option

Opt. 3 - 50% survivor option

Opt. 1E, 2E, 3E - Equated retirement plans

Schedule of Health Benefits For Years Ended September 30, 1998 and 1997

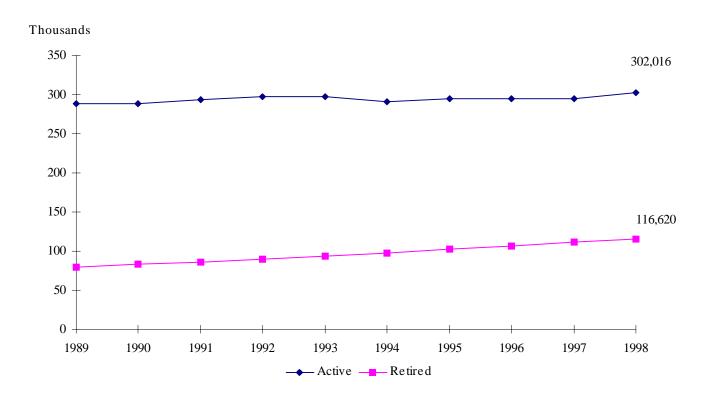
Claims	<u>1998</u>	<u>1997</u>
Health Insurance	\$ 250,401,047	\$ 236,330,585
Vision Insurance	4,075,419	4,975,924
Dental Insurance	1,039,312	27,727,841
Total Claims	\$ <u>285,515,778</u>	\$ <u>269,034,350</u>
IBNR (Incurred but not reported claims)		
Health Insurance	\$ 35,045,507	\$ 35,650,385
Vision Insurance	633,382	1,243,981
Dental Insurance	2,651,000	2,101,000
Total IBNR	\$ 38,329,889	\$ <u>38,995,366</u>
Administrative Fees		
Health Insurance	\$ 29,393,497	\$ 27,430,350
Vision Insurance	741,027	710,769
Dental Insurance	2,460,312	2,443,262
Total Administrative Fees	\$ _32,594,836	\$ _30,584,381
Subtotal	\$ 356,440,503	\$ <u>338,614,095</u>
Refunds	(374,557)*	45,539
Grand Total	\$ 356,065,946	\$ 338,659,636

^{*}Includes a cancelled check for a refund issued in 1995

Schedule of Average Benefit Payments

Retirement Effective Dates	Average Yearly Benefit	Number of Active Retirants
Period 10/01/91 to 09/30/92	\$ 9,216	90,201
Period 10/10/92 to 09/30/93	9,743	93,574
Period 10/01/93 to 09/30/94	10,397	97,989
Period 10/01/94 to 09/30/95	11,071	103,151
Period 10/01/95 to 09/30/96	11,649	107,465
Period 10/01/96 to 09/30/97	12,263	111,842
Period 10/01/97 to 09/30/98	12,908	116,620

10 Year History of Membership Fiscal Year Ended September 30



Schedule of Participating Employers thru FY 9/30/98

Universities:

Central Michigan University
Eastern Michigan University
Ferris State University
Lake Superior State University
Michigan Technological University
Northern Michigan University
Western Michigan University

Community Colleges:

Alpena Community College Bay De Noc Community College Charles S Mott Community College Delta College Glen Oaks Community College Gogebic Community College Grand Rapids Community College Henry Ford Community College Jackson County Community College Kalamazoo Valley Community College Kellogg Community College Kirtland Community College Lake Michigan College Lansing Community College Macomb Community College Mid-Michigan Community College Monroe County Community College Montcalm Community College Muskegon Community College North Central Michigan College Northwestern Michigan College Oakland Community College Schoolcraft Community College Southwestern Michigan College St. Clair County Community College Washtenaw Community College Wayne County Community College West Shore Community College

Intermediate School Districts:

Allegan County Intermediate School Distr.
Alpena-Montmorency-Alcona E. S. D.
Barry Intermediate School District
Bay-Arenac Intermediate School District
Berrien Intermediate School District
Branch Intermediate School District
C.O.O.R. Intermediate School District
Calhoun Intermediate School District

Intermediate School Districts (continued):

Charlevoix-Emmet Intermediate School District Cheboygan-Otsego-Presque Isle ISD Clare-Gladwin Intermediate School District Clinton County R. E. S. A.

Copper Country Intermediate School District Delta-Schoolcraft Intermediate School District Dickinson-Iron Intermediate School District Eastern U P Intermediate School District Eaton Intermediate School District Genesee Intermediate School District

Gogebic-Ontonagon Intermediate School District

Gratiot-Isabella R. E. S. D.

Hillsdale Intermediate School District Huron Intermediate School District Ingham Intermediate School District Ionia Intermediate School District Iosco Intermediate School District Jackson Intermediate School District

Kalamazoo Valley Intermediate School District

Kent Intermediate School District Lapeer Intermediate School District Lenawee Intermediate School District Lewis Cass Intermediate School District

Livingston E. S. A.

Macomb Intermediate School District
Manistee Intermediate School District
Marquette-Alger Intermediate School District
Mason Lake Intermediate School District
Mecosta-Osceola Intermediate School District
Menominee Intermediate School District
Midland Intermediate School District
Midland Intermediate School District
Monroe Intermediate School District
Montcalm Area Intermediate School District
Muskegon Area Intermediate School District
Newaygo Intermediate School District
Oakland Intermediate School District
Oceana Intermediate School District
Ottawa Area Intermediate School District
Saginaw Intermediate School District

Shiawassee R. E. S. D.

St. Clair Intermediate School District
St. Joseph Intermediate School District

Sanilac Intermediate School District

Traverse Bay Area Intermediate School District

Tuscola Intermediate School District Van Buren Intermediate School District Washtenaw Intermediate School District

Wayne R. E. S. A.

Wexford-Missaukee Intermediate School District

Schedule of Participating Employers (Continued)

K - 12 School Districts:

Adams Township School District

Adams-Sigel #3 School Addison Community Schools Adrian Public Schools Airport Community Schools Akron-Fairgrove Schools Alba Public Schools

Albion Public Schools Alcona Community Schools

Algonac Community Schools Allegan Public Schools

Allen Park Public Schools
Allendale Public Schools
Alma Public Schools
Almont Community Schools

Alpena Public Schools Anchor Bay School District Ann Arbor Public Schools

Arenac-Eastern High School Armada Area Schools

Arvon Township Schools Ashley Community Schools

Athens Area Schools

Atherton Community Schools Atlanta Community Schools Au Gres-Sims School District Autrain-Onota Public Schools Avondale School District Bad Axe Public Schools Baldwin Community Schools Bangor Public Schools Bangor Township Schools

Baraga Township Schools Bark River - Harris Schools Bath Community Schools Battle Creek Public Schools

Bay City Public Schools Beal City Schools Bear Lake School

Beaver Island Community Schools Beaverton Rural School District

Bedford Public Schools

Beecher Community School District

Belding Area Schools
Bellaire Public Schools
Bellevue Community Schools
Bendle Public Schools
Bentley Community Schools
Benton Harbor Area Schools

Benzie County Central Schools Berkley City School District Berrien Springs Public Schools

Bessemer Area School District Big Bay De Noc School District

Big Burning-Colfax Township School District #1F

Big Jackson School District Big Rapids Public Schools Birch Run Area Schools Birmingham City Schools

Blissfield Community School District

Bloomfield #1-Red School

Bloomfield #7 Frl-Rapson School Bloomfield Hills School District Bloomingdale Public Schools

Bois Blanc Township School District

Boyne City Public Schools Boyne Falls Public Schools Brandon School District Brandywine Public Schools Breckenridge Community Schools Breitung Township Schools

Bridgeport-Spaulding Community School District

Bridgman Public Schools
Brighton Area Schools
Brimley Public Schools
Britton-Macon Area School
Bronson Community Schools
Brown City Community Schools
Buchanan Community Schools
Buckley Community Schools
Buena Vista School District
Bullock Creek School District
Burr Oak Community Schools
Burt Township School District

Byron Area Schools

Byron Center Public Schools Cadillac Area Public Schools Caledonia Community Schools Calumet Public Schools Camden-Frontier School

Capac Community Schools

Carman-Ainsworth Community School District

Carney-Nadeau Public Schools Caro Community Schools Carrollton School District Carson City-Crystal Area Schools

Carsonville-Port Sanilac School

Caseville Public Schools Cass City Public Schools Cassopolis Public Schools

Schedule of Participating Employers (Continued)

K - 12 School Districts (continued):

Cedar Springs Public Schools Center Line Public Schools

Central Lake-Antrim County Public Schools

Central Montcalm Public Schools Centreville Public Schools Charlevoix Public Schools Charlotte Public Schools Chassell Township Schools

Cheboygan Area School District Chelsea School District Chesaning-Union Schools Chippewa Hills School District Chippewa Valley Schools Church School District Clare Public Schools Clarenceville School District

Clarkston Community Schools Clawson City School District Climax-Scotts Community Schools Clinton Community Schools Clintondale Community Schools Clio Area School District

Coldwater Community Schools Coleman Community Schools Coloma Community Schools Colon Community School

Columbia School District Comstock Park Public Schools Comstock Public Schools Concord Community Schools Constantine Public Schools

Coon-Berlin Township School District #3

Coopersville Public Schools Corunna Public Schools Covert Public Schools

Crawford-AuSable School District Crawford-Excelsior School District #1

Crestwood School District Croswell-Lexington Schools Dansville Agricultural School Davison Community Schools

Dearborn Heights School District #7

Dearborn Public Schools Decatur Public Schools

Deckerville Community School District

Deerfield Public Schools Delton-Kellogg Schools DeTour Area Schools

Detroit Public Schools

Dewitt Public Schools
Dexter Community Schools
Dowagiac-Union School District
Dryden Community Schools
Dundee Community Schools

Durand Area Schools

East China Township School District

East Detroit School District
East Grand Rapids Public Schools
East Jackson Public Schools
East Jordan Public Schools
East Lansing Public Schools
Eaton Rapids Public Schools
Eau Claire Public Schools
Eccles-Sigel #4 School
Ecorse Public Schools
Edwardsburg Public Schools

Elk Rapids Schools Elkton-Pigeon-Bay Port Schools Ellsworth Community Schools Elm River Township Schools

Engadine Consolidated School District #4

Escanaba Area Public Schools Essexville-Hampton Public Schools

Evart Public Schools

Ewen-Trout Creek Consolidated School District

Fairview Area Schools
Farmington Public Schools
Farwell Area Schools
Fennville Public Schools
Fenton Area Public Schools
Ferndale City School District
Fitzgerald Public Schools
Flat Rock Community Schools
Flint City School District
Flushing Community Schools

Forest Area Schools
Forest Hills Public Schools
Forest Park School District
Fowler Public Schools

Fowlerville Community Schools Frankenmuth School District Frankfort-Elberta Area Schools

Fraser Public Schools

Free Soil Community School District #8

Freeland Community Schools Fremont Public Schools Fruitport Community Schools

Fulton Schools

Galesburg-Augusta Community School District

Galien Township School

Schedule of Participating Employers (Continued)

K - 12 School Districts (continued):

Garden City Public Schools Gaylord Community Schools Genesee School District

Gerrish-Higgins School District Gibraltar School District Gladstone Area Schools Gladwin Community Schools Glen Lake Community Schools Glenn-Ganges School District #4

Gobles Public Schools Godfrey-Lee Public Schools Godwin Heights Public Schools

Goodrich Area Schools

Grand Blanc Community Schools Grand Haven Public Schools Grand Ledge Public Schools Grand Rapids Public Schools Grandville Public Schools Grant Public Schools Grant Township School

Grass Lake Community Schools Greenville Public Schools Grosse Ile Township Schools Grosse Pointe Public Schools Gull Lake Community Schools Gwinn Area Community Schools

Hale Area Schools

Hamilton Community Schools Hamtramck Public Schools Hancock Public Schools Hanover Horton School District

Harbor Beach Community School District

Harbor Springs Public Schools Harper Creek Community Schools Harper Woods Public Schools Harrison Community Schools

Hart Public Schools Hartford Public Schools Hartland Consolidated Schools Haslett Public Schools

Hastings Area School District

Haynor- Easton Township School District #6

Hazel Park Public Schools Hemlock Public Schools Hesperia Community Schools Highland Park School District Hillman Community Schools Hillsdale Community Schools

Holland Public Schools

Holly Area Schools Holt Public Schools Holton Public Schools Homer Community Schools Hopkins Public Schools

Houghton Lake Community Schools

Houghton-Portage Township School District

Howell Public Schools Hudson Area Schools Hudsonville Public Schools Huron School District Huron Valley School District

Ida Public Schools

Imlay City Community Schools

Inkster Public Schools Inland Lakes Schools Ionia Public Schools

Iron Mountain Public Schools

Ironwood-Gogebic City Area Schools

Ishpeming Public Schools Ithaca Public Schools Jackson Public Schools Jefferson Schools Jenison Public Schools

Johannesburg-Lewiston Area Schools Jonesville Community Schools Kalamazoo Public Schools

Kaleva Norman Dickson School District

Kalkaska Public Schools Kearsley Community Schools Kelloggsville Public Schools Kenowa Hills Public Schools Kent City Community Schools Kentwood Public Schools Kingsley Area Schools Kingston Community Schools

Kipper School

L'Anse Creuse Public Schools

L'Anse Public Schools

Laingsburg Community Schools

Lake City Area Schools

Lake Fenton Community School District Lake Linden-Hubbell Public Schools Lake Orion Community School #3

Lake Shore Public Schools
Lakeshore Public Schools
Lakeview Community Schools
Lakeview Public Schools
Lakeview School District
Lakeville Community Schools
Lakewood School District

Schedule of Participating Employers (Continued)

K - 12 School Districts (continued):

Lamphere Public Schools
Lansing Public Schools
Lapeer Public Schools
Lawrence Public Schools
Lawton Community Schools
Leland Public Schools

Les Cheneaux Community Schools

Leslie Public Schools
Lincoln Consolidated Schools
Lincoln Park Public Schools
Linden Community Schools
Litchfield Community Schools
Littlefield Public Schools
Livonia Public Schools

Loucks-Roxend Township School District #12

Lowell Area Schools
Ludington Area Schools
Mackinac Island Public Schools
Mackinaw City Public Schools
Madison District Public Schools
Madison School District #2
Mancelona Public Schools
Manchester Community Schools
Manistee Public Schools

Manistique Area Schools

Manton Consolidated School District

Maple Valley Schools
Mar Lee School District
Marcellus Community Schools
Marenisco School District
Marion Public Schools
Marlette Community Schools
Marquette Area Public Schools
Marshall Public Schools
Martin Public Schools
Marysville Public Schools
Mason Consolidated Schools

Mason County Central School District

Mason County-Eastern-Custer #5 School District

Mason Public Schools

Mattawan Consolidated Schools Mayville Community Schools McBain Rural Agricultural School

Melvindale-Northern Allen Park School District

Memphis Community Schools Mendon Community School Menominee Area Public Schools Meridian Public Schools

Merrill Community Schools

Mesick Consolidated Schools Michigan Center School District

Mid Peninsula Schools Midland City Schools Milan Area Schools

Millington Community School District

Mio-AuSable Schools

Mona Shores School District #29

Monroe Public Schools

Montabella Community Schools Montague Area Public Schools Montrose Community Schools Moran Township School District

Morenci Area Schools

Morley-Stanwood Community Schools

Morrice Area Schools

Mt Clemens Community Schools Mt Morris Consolidated Schools Mt Pleasant Public Schools Munising Public Schools Muskegon City Public Schools

Muskegon Heights City Public Schools

Napoleon Comm. School District

Negaunee Public Schools
New Buffalo Area Schools
New Haven Community Schools
New Lothrup Area Public Schools

Newaygo Public Schools Nice Community Schools Niles Public Schools

North Adams-Jerome Public Schools

North Branch Area Schools North Central Area Schools North Dickinson School North Huron Schools North Levalley School #2 North Muskegon Public Schools Northport Public Schools

Northport Public Schools Northview Public Schools Northville Public Schools Northwest School District Norway-Vulcan Area Schools Nottawa Community School District

Oak Park School District Oakridge Public Schools Okemos Public Schools Olivet Community Schools Onaway Area Community Schools

Onekama Consolidated Schools Onsted Community Schools

Schedule of Participating Employers (Continued)

K - 12 School Districts (continued):

Ontonagon Area School District

Orchard View Schools Osceola Township Schools Oscoda Area Schools Otsego Public Schools Ovid-Elsie Area Schools

Owendale-Gagetown Area Schools

Owosso Public Schools

Oxford Area Community Schools

Palo Community Schools
Parchment School District
Paw Paw Public Schools
Peck Community Schools
Pellston Public Schools
Pennfield Schools
Pentwater Public Schools
Perry Public Schools
Petoskey Public Schools

Pewamo-Westphalia Community School District

Pickford Public Schools Pinckney Community Schools Pinconning Area Schools Pine River Area Schools Pittsford Area Schools Plainwell Community Schools

Plymouth-Canton Community School District

Pontiac City School District
Port Hope Community Schools
Port Huron Area Schools
Portage Public Schools
Portland Public Schools
Posen Consolidated Schools
Potterville Public Schools
Powell Township School District
Quincy Community Schools
Rapid River Public Schools
Ravenna Public Schools
Ravenna Public Schools
Reading Community Schools
Redford-Union School District #1

Reed City Public School District Reese Public Schools Reeths-Puffer Schools

Republic-Michigamme Schools Richmond Community Schools River Rouge Public Schools

River School

River Valley School District Riverside-Hagar School District #6 Riverview Community Schools Rochester Community Schools Rockford Public Schools Rogers City Area Schools Romeo Community Schools Romulus Community Schools Roseville Community Schools Royal Oak City School District

Rudyard Public Schools Saginaw City Schools

Saginaw Township Community Schools

Saline Area Schools

Sand Creek Community Schools Sandusky Community Schools Saranac Community Schools Saugatuck Public Schools Sault Ste Marie Public Schools Schoolcraft Community Schools

Shelby Public Schools
Shepherd Public Schools
South Haven Public Schools
South Lake Public Schools
South Lyon Community Schools
South Redford School District
Southfield Public Schools

Southgate Community School District

Sparta Area Schools
Spring Lake Public Schools
Springport Public Schools
St. Charles Community Schools
St. Ignace Public Schools
St. Johns Public Schools
St. Joseph Public Schools

Standish-Sterling Community School Distr.

Stanton Twnshp. Public Schools Stephenson Area Public Schools Stockbridge Community Schools Strange-Oneida School #3 Sturgis Public Schools

Summerfield Schools

St. Louis Public Schools

Suttons Bay Public Schools Swan Valley School District Swartz Creek Community Schools Tahquamenon Area School District

Superior Central School District

Tawas Area Schools Taylor Township Schools Tecumseh Public Schools Tekonsha Community Schools Thornapple-Kellogg School Three Rivers Community Schools

Schedule of Participating Employers (Continued)

K - 12 School Districts (continued):

Traverse City Public Schools
Trenton Public Schools
Tri-County Area Schools
Troy City School District
Ubly Community Schools
Union City Community Schools
Unionville-Sebewaing Area Schools

Utica Community Schools Van Buren Public Schools Van Dyke Public Schools Vanderbilt Area Schools

Vandercook Lake Public Schools

Vassar Public Schools Verona Mills School

Vestaburg Community Schools Vicksburg Community Schools Wakefield Township Schools

Waldron Area Schools

Walkerville Rural Community School Distr.

Walled Lake Consolidated Schools Warren Consolidated Schools Warren Woods Public Schools Waterford School District

Watersmeet Township School District

Watervliet Public Schools Waverly Community Schools Wayland Union Schools

Wayne-Westland Community Schools Webberville Community Schools Wells Township School #18 West Bloomfield Schools

West Branch-Rose City Area Schools West Iron County Public Schools West Ottawa Public Schools Western School District Westwood Community Schools Westwood Heights Schools

White Cloud Public Schools
White Pigeon Community Schools

White Pine School District
Whitefish Township School
Whiteford Agricultural School
Whitehall District Schools
Whitmore Lake Public Schools
Whittemore-Prescott Area Schools
Williamston Community Schools
Willow Run Community Schools
Wolverine Community Schools

Wood School District #8

Woodhaven School District Wyandotte Public Schools Wyoming Public Schools Yale Public School District Ypsilanti Public Schools Zeeland Public Schools

Public School Academies:

Academy for Plastics Mfg. Technology AGBU Alex & Marie Manoogian School Aisha Shule/WEB Dubois Prep School Ann Arbor Learning Community

Bahweting Anishnabe Public School Academy

Bay-Arenac Community High School

Benito Juarez Academy Casman Alternative Academy

Central Academy Colin Powell Academy

Commonwealth Comm Development Academy

Concord Academy Antrim Countryside Charter School Creative Technologies Academy Crossroads Charter Academy

Dearborn Academy

Detroit Academy of Arts & Sciences Detroit Community High School

Discovery Elementary School (Fennville Charter)

Edison Public School Academy El-Hajj Malik El-Shabazz Academy

Endeavor Charter Academy Excel Charter Academy Gateway Middle High School

Gaudior Academy

George Washington Academy

Henry Ford Academy of Mfg. Arts & Science

Honey Creek Community School

Hope Academy

Horizons Community High School Kalamazoo Advantage Academy Lakeshore Public Academy Learning Center Academy, The

Macomb Academy

Martin Luther King, Jr. Public School Academy

Michigan Early Elementary Center Michigan Institute for Construction Trades Mid-Michigan Public School Academy Nah Tah Wahsh Public School Academy

Nataki Talibah School of Detroit

New Branches School New Horizon Academy

Schedule of Participating Employers (Continued)

Public School Academies (continued):

Northside Preparatory School

Oasis Academy

Paragon Charter Academy

Paramount Charter Academy

Pathfinder Charter Academy

Plymouth Educational Center Charter School

Questar Academy

Renaissance Public School Academy

Ridge Park Charter Academy

Sankofa Shule

Sankore Marine Immersion H.S. Acad

St. Clair County Learning Academy

Summit Academy

Summit Academy North

Tri High School

Walden Green Day School

Warwick Pointe Academy

Washtenaw Technical Middle College

Weston Technical Academy

Will Carleton Academy

Windover High School

Libraries:

Ann Arbor District Library
Bacon Memorial District Library
Cheboygan Area Public Library
Grosse Pointe Public Library
Harbor Beach District Library
Kalamazoo Public Library
Public Libraries of Saginaw
Willard District Library

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